Public Health Action

International Union Against Tuberculosis and Lung Disease
Health solutions for the poor

VOL 7 NO 1 PUBLISHED 21 MARCH 2017

Do incentivised community workers in informal settlements influence maternal and infant health in urban India?

H. Verma,[1] K. D. Sagili,[2] R. Zachariah,[3] A. Aggarwal,[4] A. Dongre,[5] H. Gupte[6]

http://dx.doi.org/10.5588/pha.16.0056

Setting: The introduction of accredited social health activists (ASHAs, community workers) in the community is encouraged by the Government of India as being of universal benefit for maternal and infant health.

Objectives: In two informal settlements in Chandigarh, India, one with ASHAs and the other without, we assessed 1) whether ASHAs influenced certain selected maternal and infant health indicators, and 2) perceptions among women who did not contact the ASHAs.

Design: This was a mixed-methods study conducted from April 2013 to March 2016 using quantitative (retrospective programme data) and qualitative (free-listing) components.

Results: The increase in institutional deliveries from 2013 to 2015 was marginal, and was similar in both areas (86–99% in the settlement with ASHAs and 88–97% in the settlement without). Bacille Calmette-Guérin and pentavalent vaccination coverage were close to 100% in both areas during the 3 years of the study. Antenatal registration in the first trimester increased from 49% to 52% in the settlement with ASHAs and from 53% to 71% in the settlement without. Between 18% and 35% of women did not complete at least three antenatal visits. 'Not knowing ASHAs' and 'not feeling a need for ASHAs' were the main reasons for not using their services.

Conclusion: While success has been achieved for institutional deliveries and immunisation coverage even without the ASHAs, their presence plays an important role in improving antenatal indicators.

The year 2016 ushered in the era of the Sustainable Development Goals (SDGs), with one target being a reduction in maternal and under-fives mortality.[1] Although global progress has been steady, several countries, including India, are lagging behind target.[2] India contributes 21% of childhood and 18% of maternal deaths globally.[3]

The Government of India encourages specific strategies to improve maternal and child health, of which one is the nationwide introduction of accredited social health activists (ASHAs). First introduced in rural India in 2005 and extended to urban settings in 2013, ASHAs are female community-based volunteers residing in target communities and mandated to conduct various health-related activities for which they receive performance-based monetary incentives.[4,5]

Although two studies from rural India showed an added benefit of ASHAs in terms of maternal and child health (MCH) services,[6,7] these studies were not focused on urban areas or informal settlements. Access to health services, health-seeking behaviour and the utilisation of existing services may be different in informal urban settlements. Understanding the role of community health workers in maternal and infant health services in such settings would be of relevance to India and other large cities around the world where informal settlements are becoming a norm.

We aimed to assess the possible influence of ASHAs on the utilisation of maternal and infant health services in informal settlements in Chandigarh, an urban area of North India. In two of these settlements, specific objectives were to report on trends in 1) antenatal care registrations in the first trimester and completion of at least three antenatal visits, 2) institutional and home deliveries, 3) immunisation coverage in infants (bacille Calmette-Guérin [BCG] and three doses of DPT [diphtheria, pertussis and tetanus] or pentavalent vaccine [diphtheria, pertussis, tetanus, hepatitis B and *Haemophilus influenzae* type B]), and 4) maternal, infant and neonatal deaths. We also explored perceptions of women who did not access ASHAs.

METHODS

Study design

This was a mixed-methods study.

Study setting

Chandigarh was one of the first planned cities in India, and is known internationally for its urban architecture and design. The geographic area of the city is relatively small, and health facilities are accessible at a radius of 1–2 km from all households. Antenatal care and immunisation services are offered free-of-charge at all health facilities.

Maternal and child health indicators and services in Chandigarh

The health system in Chandigarh is a three-tiered structure. Deliveries are offered only at the secondary and tertiary levels. Auxiliary nurse midwives (ANMs) are involved in MCH, and are present at all levels of the health facilities. They are responsible for antenatal and immunisation services at health facility level and for community outreach activities. Another complementary cadre is the Anganwadi workers (AWWs), who work at community-based child centres and promote child care activities, including immunisation. The national antenatal care package and immunisation schedule is shown in Table 1.

AFFILIATIONS
1 National Health Mission, Department of Health, Chandigarh, India
2 International Union Against Tuberculosis and Lung Disease, South-East Asia Office, New Delhi, India
3 Médecins Sans Frontières, Brussels Operational Centre, Luxembourg City, Luxembourg
4 Postgraduate Institute of Medical Education and Research, Chandigarh, India
5 Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
6 Nanavati Sekhsaria Foundation, Mumbai, India

CORRESPONDENCE
Himbala Verma
National Health Mission
Department of Health
Chandigarh 160 022, India
e-mail: drhimbalaverma@yahoo.co.in

KEY WORDS
SDRT II, operational research, SDGs, auxiliary nurse midwife

Received 25 July 2016
Accepted 2 February 2017

PHA 2017; 7(1): 61–66

Original Article

Factors associated with high stress levels in adults with diabetes mellitus attending a tertiary diabetes care center, Chennai, Tamil Nadu, India

Muthappan Sendhilkumar, Jaya Prasad Tripathy[1], Anthony D. Harries[2,3], Amol R. Dongre[4], Mohan Deepa, Ashok Vidyulatha, Subramanian Poongothai, Ulaganathan Venkatesan, Ranjit Mohan Anjana, Viswanathan Mohan

Madras Diabetes Research Foundation, Dr. Mohan's Diabetes Specialities Centre, Chennai, Tamil Nadu, [1]International Union Against Tuberculosis and Lung Disease, The Union South-East Asia Office, New Delhi, [2]Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India, [3]International Union Against Tuberculosis and Lung Disease, Paris, France, [4]London School of Hygiene and Tropical Medicine, Keppel Street, London, UK

ABSTRACT

Objective: We aimed to determine perceived stress levels among adults aged >20 years with type 2 diabetes mellitus (DM) in a tertiary care diabetes center, Chennai, Tamil Nadu, India, assess their association with sociodemographic and clinical characteristics and assess the possible risk factors for stress and coping strategies. **Methods:** A mixed-methods (triangulation design) study with quantitative methodology (survey) and qualitative methodology (interviews) was carried out. Stress levels were assessed among type 2 DM patients attending a diabetes clinic using a 5-point perceived stress scale-10. One-on-one interviews were carried out with 876 participants with DM having high/very high stress levels to understand the reasons for perceived stress and explore their coping mechanisms. **Results:** The prevalence of high/very high stress was 35% among DM patients. Age 30–40 years, working in professional jobs, and lack of physical activity were factors significantly associated with stress. The perceived major stress inducers were related to family, work, financial issues, and the disease itself. **Conclusions:** This study showed high levels of stress in more than one-third of DM patients. Potential solutions include regular, formal assessment of stress levels in the clinic, providing integrated counseling and psychological care for DM patients, and promoting physical activity.

Key words: Diabetes mellitus, India, perceived stress score, physical activity

INTRODUCTION

Diabetes mellitus (DM) is one of the most common noncommunicable diseases in the world. According to the International Diabetes Federation estimates, around 415 million people had DM in 2015 and this number is expected to rise to 642 million by 2040.[1] Around 75% of participants with DM live in low- and middle-income countries.[1] In financial terms also the global burden of DM is enormous, with an estimated annual expenditure in 2015 of USD$ 673 billion dollars, which constituted 12% of global health spending for that year.[2]

India with 69.1 million people is estimated to have the second-highest number of cases of DM in the world

Corresponding Author: Dr. Muthappan Sendhilkumar, Madras Diabetes Research Foundation, Dr. Mohan's Diabetes Specialities Centre, No. 6, Conran Smith Road, Gopalapuram, Chennai - 600 086, Tamil Nadu, India.
E-mail: drsendhilmj86@gmail.com

Access this article online	
Quick Response Code:	Website: www.ijem.in
	DOI: 10.4103/2230-8210.196006

Cite this article as: Sendhilkumar M, Tripathy JP, Harries AD, Dongre AR, Deepa M, Vidyulatha A, *et al.* Factors associated with high stress levels in adults with diabetes mellitus attending a tertiary diabetes care center, Chennai, Tamil Nadu, India. Indian J Endocr Metab 2017;21:56-63.

ORIGINAL ARTICLE ASIAN JOURNAL OF MEDICAL SCIENCES

Effect of 24-hrs of sleep deprivation on Central Auditory Processing in young people - A Quasi-Experimental study

Naziruddin Husamuddin[1], Shivayogappa S Teli[2]

[1]Assistant Professor, Department of Physiology, Government Vellore Medical College, Vellore, TN, India, [2]Professor and Head, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Submission: 25-07-2020 Revision: 27-08-2020 Publication: 01-11-2020

ABSTRACT

Background: Adequate amount of sleep is the basic need for survival. It is a well-known fact that disturbed sleep, acute or chronic, deteriorates the homeostasis. Sleep deprivation (SD) produces many adverse health consequences by affecting almost all the organ systems and their functions. However, sufficient literature was lacking on the effect of SD on central auditory processing (CAP), especially the temporal resolution component in young individuals. **Aims and Objective:** Therefore, this study aimed to investigate the impact of 24-hrs of sleep deprivation on the temporal resolution ability of young healthy night-shift employees. **Materials and Methods:** It was a Pretest-posttest study design (Quasi-Experimental study) comprising sixty (N = 60) healthy security staff. After the initial survey, Tuning fork tests and Pure Tone Audiometry were performed to rule out hearing loss. Temporal resolution was assessed twice (before and after SD) by Random Gap Detection test (RGDT) where a pair of pure tone was presented at different frequencies with 'intervals of silence' between each pair of tones and average time interval (in milliseconds) was taken. Data analysis was done by SPSS 24 software. **Results:** There was an increase in RGDT values after sleep deprivation 10.70 ± 0.46 (Mean ± SD), but the difference was not significant (p-value = 0.5172) when compared with baseline values 10.65 ± 0.48 (Mean ± SD). **Conclusion:** Based on the research findings, we conclude that 24-hours of acute sleep deprivation didn't show any negative impact on the temporal resolution component of CAP mechanism in young, healthy individuals.

Key words: Central auditory processing; Homeostasis; Pure tone audiometry; Random gap detection test; Sleep deprivation

Access this article online

Website: http://nepjol.info/index.php/AJMS

DOI: 10.3126/ajms.v11i6.30207

E-ISSN: 2091-0576

P-ISSN: 2467-9100

INTRODUCTION

Sleep is a vital biologic process necessary for the survival of all living creatures. In human beings, an adequate amount of sleep is a fundamental requirement in everyday life for maintaining optimal health state i.e. Homeostasis. Existing literature on sleep provides us variety of definitions. In simple terms, sleep is defined as the state of unconsciousness from which a person can be aroused by sensory or other stimuli.[1] Being essential for life, sleep plays an important role in optimal functioning of various physiological processes of nervous, immune, hormonal, cardiovascular, and other systems.

Inadequate sleep or sleep deprivation (SD) is a common problem in modern society affecting almost all humans irrespective of their professions. Numerous factors affect sleep that range from lifestyle factors to various medical conditions. Condensed sleep-time has been associated with many adverse health consequences, which include reduced quality of life, emotional distress, autonomic nervous system imbalance, somatic problems, behavior problems, performance reductions in physical and mental tasks, obesity, hypertension, diabetes mellitus, etc.[2] However, there is a paucity of information on the effect of SD on auditory processing of sound stimuli in young, sleep-deprived adults. Interestingly, by online and

Address for Correspondence:
Dr. Shivayogappa S Teli, Professor and Head, Department of Physiology, Sri ManakulaVinayagar Medical College and Hospital, Puducherry. **Mobile:** +91-8122557996. **E-mail:** shivateli222@yahoo.com

Original Article

Journal of Advances in Medical Education & Professionalism

Evaluation of one-month foundation course for the first year undergraduate students at a Medical College in Puducherry, India

DEEPIKA VELUSAMI[1], PhD; AMOL R DONGRE[2], MD; RAJENDRA N KAGNE[3], MD

[1]Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry-605 107, India; [2]Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry-605 107, India; [3]Department of Forensic Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry-605 107, India

Abstract

Introduction: Medical Council of India has revised the undergraduate medical curriculum by introducing "Competency-based Medical Education" which emphasizes the foundation course of one-month duration. This period is said to be essential for students to get acclimatized to the new college environment. The present study evaluated the first one-month foundation course from students and faculty members' point of view.

Methods: The present study was program evaluation. The study participants were all 150 first year medical students joining the college and preclinical department faculty in the academic year, 2019-20. The foundation program was pre-planned and implemented as per the Medical Council of India guidelines. The program was evaluated using a pre-designed questionnaire where the items were aligned with the research question and inputs were obtained from all faculty members. Kirkpatrick framework level 1 was used for evaluation. Feedback was received from the faculty members by force field analysis and from student's using a five-point Likert scale. A summative approach to the qualitative content analysis was done to identify certain themes from the text data and infer meaning for the force field analysis obtained from the faculty. Considering the high rating for most of the sessions, we arbitrarily considered values above 75% to reflect good consensus and below 75% to reflect poor consensus. Consensus measure expressed in percentage was obtained for each item. The quantitative data were analyzed using open Epi info version 7.0.

Results: The consensus scores ranged from 73.7 to 83.3 percent. The sessions on learning styles, student support system, self-directed learning, communication skills, medical ethics, soft skills, and orientation to health systems in India reflected good consensus, indicating that these sessions were well received by the students. Other sessions like stress management, interpersonal skills, presentation skills, email writing and ethics for mobile usage reflected poor consensus, implying the need for further improvement. As per the faculty perception, good coordination, teamwork, and proper planning at interdepartmental and intradepartmental levels were the key features for the successful implementation of the course.

Conclusion: Overall, the sessions in the foundation course were well received by the students. As felt by both students and faculty, more interactive sessions need to be incorporated. The major strength of the course was the skill module, visit to special school, and field visit to the community and primary health center. The findings will help us to improve our next year foundation program to meet the purpose of the Foundation course.

Keywords: Medical students; Medical teaching; Medical college

*Corresponding author:
Deepika Velusami, PhD;
Department of Physiology,
Sri Manakula Vinayagar Medical College and Hospital,
Kalitheerthalkuppam,
Madagadipet,
Puducherry- 605 107, India
Tel: +91-8217958560
Email: deepy963@gmail.com

Please cite this paper as: Velusami D, Dongre AR, Kagne RN. Evaluation of one-month foundation course for the first year undergraduate students at a Medical College in Puducherry, India. J Adv MedEducProf. 2020;8(4):165-171. DOI: 10.30476/jamp.2020.86857.1272.

Received: 7 June 2020
Accepted: 22 August 2020

https://doi.org/10.46389/rjd-2020-1009
www.rjdnmd.org

Rom J Diabetes Nutr Metab Dis
2020; volume 27, issue 1, pages 50-56

Original Article

The Relationship between Non-Linear Analysis of Heart Rate Variability, QTc Interval and Cardiovascular Risk Factors in Young Individuals with Pre-Diabetes

Deepika Velusami [1*], Vijayakumar Raman [2*], Muthu Gopal [3]

[1] Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[2] Department of Physiology, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry, India
[3] Model Rural Health Research Unit, Indian Council of Medical Research- National Institute of Epidemiology, Linked to Tirunelveli Medical College, Primary Health center campus, Kallur, Tirunelveli, India

* Correspondence to: Vijayakumar Raman, Department of Physiology, Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry India. Phone: +91 8248645800; e-mail: sivanviji@gmail.com. Deepika Velusami, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India. Phone: +91 9962279360; e-mail: deepy843@gmail.com

Received: 4 March 2020 / Accepted: 10 March 2020

Abstract

Introduction: Cardiac autonomic functions and cardiovascular risk factors are closely associated with each other. This study aimed to evaluate the cardiac autonomic status employing the Poincaré plot and QTc in young pre-diabetic individuals and correlate it with the cardiovascular risk factors. **Material and Methods:** This was a cross-sectional study. The students participating in the health check-up program organized by the college were the study participants. Basal anthropometric measurements, detailed family, and personal medical history were documented. Autonomic functions were evaluated. Plasma glucose and lipid profile were evaluated biochemically. Based on the impaired fasting plasma glucose and impaired glucose tolerance values, subjects were classified as normal and pre-diabetes mellitus groups. **Results:** A total of 295 subjects (198 normal and 97 pre-diabetes mellitus), were evaluated. Standard descriptor 1 and 2 in the pre-diabetes mellitus group reported a significant decrease, p<0.0001, (95% CI 15.98, 19.07) (95%CI 31.75 37.26) compared to the normal group (95% CI 26.33, 30.27) (95% CI 48.39, 52.71). QTc was significantly increased in the pre-diabetes mellitus group, p<0.0001, (95% CI 415.62, 423.99). Body mass index, fasting plasma glucose, and lipid parameters reported as being significant independent variables were associated with autonomic function test parameters. **Conclusion:** Cardiac autonomic dysfunction starts appearing in the pre-diabetic stage itself. Body mass index and altered lipid profiles showed a significant association with increased blood glucose levels. Early detection at a young age can help to plan better prevention and treatment strategies.

Keywords: Impaired fasting glucose, Oral glucose tolerance, QTc interval, Heart rate variability.

Introduction

In India, 69.1 million individuals have diabetes, making it the Diabetic Capital of the world [1]. The reasons for the alarming increase may be due to rapid socio-economic and nutritional transition, lack of self-awareness, and follow-up programs in the society. As per the "ticking clock hypothesis", the microvascular disease manifestation appears in the precursor stage, before the expression of full-blown clinical type 2 diabetes mellitus [2]. According to the American Diabetes Association, pre-diabetes is Impaired Fasting Glucose (IFG) ranging from 100-125 mg/dL or Impaired Glucose Tolerance (IGT) of 140- 199 mg/dL [3]. Pre-diabetes is related to increased cardiovascular (CV) disease and mortality [4]. Evaluation strategies targeting the younger candidates with increased risk will be a potential boon for the society to plan early interventional strategies.

Indian Journal of Medical Case Reports ISSN: 2319–3832(Online)
An Open Access, Online International Journal Available at http://www.cibtech.org/jcr.htm
2020 Vol.9 (2) July-December, pp. 31-34/Jayanthi
Case Report

BILATERAL AXILLARY ACCESSORY BREAST TISSUE IN A MALE- A CASE REPORT

Jayanthi C*
Department of Pathology, Sri Manakula vinayagar Medical College and Hospital, Villupuram dt, Tamil Nadu, India-605108
**Author for Correspondence: drjayanthichandran@gmail.com*

ABSTRACT
Accessory breast tissue (ABT) is more frequent in females compared to male counterparts, commonest presentation being unilateral axillary mass. Presence of bilateral accessory breast tissue in male is a rare occurrence and it is noteworthy due to its need for close follow-ups. We report a case of bilateral axillary accessory breast in a 25 year old male with no other complaints. The importance of fine needle aspirate as diagnostic tool in an unsuspected case of ectopic breast tissue without nipple aerola is emphasised here.

Keywords: *Accessory Breast Tissue, Axilla, Fine Needle Aspiration*

INTRODUCTION
Accessory breast tissue (ABT) is the presence of a nipple, areola or glandular tissue in addition to the normal pair of breasts (Guray and Sahin, 2006). It is metonym with polymastia, supernumerary or ectopic breast tissue. ABT is more frequently seen along the milk line, axilla being the commonest location. However, an anatomic location outside the milk line should not preclude a diagnosis of ectopic breast tissue, as there are many well-documented, unusual sites of such tissue, including the knee, lateral thigh, buttock, face, ear, and neck (Guray, Sahin, 2006). It may occur unilaterally or bilaterally. It incidence in female (0.4-6%) seems to outnumber its male counterpart (1-3%) (Sahu *et al.*, 2007). There is a drift in the occurence of ABT among the Asian population especially Japanese than Caucasian (Neki *et al.*, 2014). The components of ABT may include nipple, areola, and/ or glandular tissue. When nipple-areolar complex is absent, the presence of ABT is difficult to identify. Its development is hormone dependent, similar to normal breast tissue. The functionality of ABT determines its response to physiological hormonal stimulus. Ectopic breast tissue usually arises sporadically; however, a hereditary predisposition has also been reported (Nirmala *et al.*, 2010).

CASE
A 25-year-old male presented to surgery out patient department of GTB hospital with history of bilateral axillary swellings for past 5 months. Swelling was gradually increasing in size and was associated with mild pain. A clinical diagnosis of bilateral axillary lymphadenopathy was offered. Examination of both axillary regions revealed a mildly tender, soft and mobile swelling measuring 1.5 X 1.5cms and 2 X 2cms on left and right sides respectively. The swelling was placed in the subcutaneous plane. Fine needle aspiration was attempted from both sides using 23 gauge needle attached to 10 ml syringe. FNA from left side yielded fluid mixed aspirate with few fragments of tissue, while from right side it was predominantly blood mixed aspirate. Two air dried May Grunwald Giemsa (MGG) stained and 1 alcohol fixed papaniculou stained smears were made from both sides.
Fine needle aspirate from both left and right axillary swellings were cellular with uniform monolayered sheets of benign ductal epithelial cells along with few darkly staining myoepithelial cells in a fluid background (Fig 1, 2). Cytomorphological features were consistent with benign breast tissue in accessory location. Since the swelling was recent in onset (past two months only) gynecomastia was suspected and the patient was reexamined. However his bilateral breasts were not enlarged. They were normal looking with no other complaints. To find out cause of gynecomastia in accessory breast a detailed history and clinical examination was done. He was not taking any drugs that could induce gynecomastia. The patient

https://doi.org/10.46389/rjd-2021-1012
www.rjdnmd.org

Rom J Diabetes Nutr Metab Dis
2021; volume 28, issue 1, pages 84-87

Original Research

Comparison of nerve conduction parameters in type 2 diabetic subjects: recently diagnosed versus chronic diabetes

Senthamil selvi Kaliaperumal*, Padmaavathy Prabakar, Mangani Mangalavalli Shanmugarajah

Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

*Correspondence to: Senthamil selvi K, Assistant Professor, Department of Physiology, Sri Manakula Vinayagar Medical College & Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry (UT) - 605 107, India, E-mail: selvi66@gmail.com, Phone: +91- 99444 25315, Fax: +91-0413-2641549

Received: 21 August 2020 / Accepted: 25 January 2021

Abstract

Introduction: Diabetes mellitus (DM) is one of the major non-communicable diseases and may cause blindness, renal failure, and non-traumatic limb amputations in chronic condition. Periodic clinical assessment with supportive electrophysiological tests is highly recommended for early diagnosis of peripheral neuropathy in diabetic patients. **Materials and Methods:** In order to compare the nerve conduction study parameters on diabetes with two different durations of the disease, the recruited diabetic patients were divided into two groups, Group I - Recently diagnosed type 2 diabetes (within 1–2 years) and Group II -chronic diabetic patients with more than 5 years of disease. Nerve conduction study was done with RMS-EMG machine and latency, duration, and amplitude parameters of sural nerve conduction recordings were measured. The significance of study parameters between groups was analyzed by using independent sample "t" test. **Results:** There is no statistically significant change in the latency, amplitude, and conduction velocity of the sural nerve among the aforesaid study groups.

Keywords: Diabetic neuropathy, nerve conduction study, sural Nerve.

Introduction

Type 2 diabetes is a major public health issue and the expected worldwide diabetes population could surpass 640 million by the year 2040 [1]. India and China together have become a global epicentre of the diabetic epidemic as 60% of the world's diabetic population is from Asia [2]. Microvascular complications such as nephropathy, neuropathy, and retinopathy and macrovascular complications such as stroke, and peripheral artery disease are common among chronic diabetics and accountable for significant morbidity and mortality [1].

Diabetic neuropathy involves damage in sensory, motor, and autonomic nerve fibres and accounts for 28% complications in diabetics [3]. It is the crucial risk factor in 90% of diabetic foot ulcers [4] and foot ulceration is the first indicator in diabetic patients, who underwent non-traumatic lower-limb amputations later [5]. As the appearance of symptoms of diabetic neuropathy occurs after a long duration of disease, it is imperative to identify diabetic neuropathy in the early stage itself. Clinically, the monofilament test, vibration test, tests for pinprick sensation, and ankle reflex are generally employed in the diagnosis of diabetic neuropathy [4]; however, electrophysiological studies help us to detect early abnormalities in diabetic patients that may not be clinically apparent [6].

Nerve conduction study is a widely used electrodiagnostic test to assess the nerve functions in diabetic neuropathy, which affects the nerve conduction velocity, amplitude, and latency. As the complications of neuropathy show its symptoms after many years of diabetic duration, we wanted to know whether the neurophysiological

https://doi.org/10.46389/rjd-2022-1077
www.rjdnmd.org

Rom J Diabetes Nutr Metab Dis
2022; volume 29, issue 1, pages 74-82

Original Research

The efficacy of isometric handgrip training on arterial stiffness and blood pressure in elevated and stage 1 hypertensive individuals – An interventional study

Deepika Velusami*, Soundariya Krishnamurthy, Shivayogappa S. Teli, Senthamil Selvi S., Mangani Mangalavalli S.

Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry, India-605107

*Correspondence to: Deepika Velusami, Associate Professor, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry, India-605107, E-mail id: deepy843@gmail.com

Received: 27 November 2021 / Accepted: 11 January 2022

Abstract

Objectives: Hypertension is considered a risk factor for cardiovascular diseases. Various forms of exercise are recommended for the pre-hypertensive stage as a prevention measure. The objective of the study was to evaluate the effect of isometric handgrip resistance exercise on blood pressure (BP) and arterial stiffness in elevated and stage 1 hypertensive individual. **Materials and Methods:** In this interventional study, 50 pre-screened pre-hypertensive individuals participated in the isometric handgrip exercise training. Participants were instructed to follow 40% maximum voluntary contraction (MVC) with three sessions per week for 8 weeks. BP and vascular indices namely reflection and stiffness indices were measured and compared before and after the exercise. **Results:** Forty individuals participated in the program and were divided into two groups: Group I (n=21) with elevated BP and Group II (n=19) with stage 1 hypertension. Our study report indicates that the systolic BP was significantly decreased in both the groups ($p<0.001$) while diastolic BP decreased only among the elevated BP group ($p=0.01$). Vascular indices did not report any significant change in both groups. Systolic ($p=p<0.001$), diastolic ($p=0.03$), pulse pressure ($p=0.001$) and mean arterial pressure ($p<0.001$) were significantly reduced when both the groups were taken together for the analysis. Heart rate was a significantly positive correlation with the vascular indices ($p<0.001$), similarly, diastolic BP was significantly positively correlated with stiffness index ($p<0.001$). **Conclusion:** Isometric handgrip exercise with 40% MVC with three sessions per week for 8weeks is effective in reducing the BP levels but has no effect on arterial stiffness. Thus, this form of exercise can be recommended for the young pre-hypertensive.

Keywords: isometric handgrip exercise, elevated blood pressure, stage 1 hypertension, pre-hypertension.

Introduction

Hypertension is referred to as a "silent killer" since it may not produce any warning signs and symptoms and is the major cause of premature deaths globally and is also associated with cardiovascular diseases. The precursor stage was named by the Joint National Committee on prevention, detection and treatment of high blood pressure as 'pre-hypertension' [1] in 2003, which has been further re-classified as "elevated" and "stage 1" hypertension in 2018, by the American Heart Association Task Force in 2017. In view of the increasing trends in hypertension in young individuals, blood pressure assessment in all young individuals at every opportunity is both prudent and justified. Non-pharmacological therapies are recommended for elevated and

International Journal of Current Research and Review
DOI: http://dx.doi.org/10.31782/IJCRR.2021.13933

Scopus

Research Article

IJCRR
Section: Healthcare
(2019-20): 1.629
IC Value (2019): 90.81
SJIF (2020) = 7.093

Association of Anti-TPO Antibodies with Insulin Resistance and Dyslipidemia in Hashimoto's Thyroiditis: An Observational Study on South Indian Population

Rajarajeswari R[1], Sumathi S[2], Asmathulla S[3], Srinivasan AR[2], Girija S[3], Maithili Karpaga Selvi N[4]

[1]Department of Biochemistry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India; [2]Department of Biochemistry, Mahatma Gandhi Medical College and Research Institute, Puducherry, India; [3]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India; [4]Department of Biochemistry, All India Institute of Medical Sciences, Jodhpur, India.

ABSTRACT

Introduction: Hashimoto's Thyroiditis (HT) is a frequently observed autoimmune thyroid disease and the commonest cause of hypothyroidism. Although the association of hypothyroidism with cardiovascular risk is a well-documented fact, it is still not clear as to whether thyroid autoimmunity is an independent risk factor for atherosclerosis, a cardiometabolic risk factor.

Objective: In this study, we attempted to elicit the probable association of Anti –Thyroid peroxidase (Anti-TPO) antibodies with cardiometabolic factors (insulin resistance and dyslipidemia) in patients.

Methods: In this observational study, sixty-five healthy controls and sixty-eight HT patients were enrolled. Serum concentrations of TSH, FT4, FT3, (Anti-TPO), Total Cholesterol (TC), Triglycerides (TG), HDL-Cholesterol (HDL-C), Very Low-Density Lipoprotein (VLDL), Fasting Blood Glucose (FBG) and Fasting Insulin levels were measured. LDL-Cholesterol (LDL-C), HOMA-IR and Atherogenic Index of Plasma (AIP) were calculated.

Results: There was a significant increase in TC, TG, LDL, VLDL, AIP, Fasting Insulin and HOMA-IR among the HT group ($P < 0.001$) compared to healthy controls. Despite a significant positive correlation between Anti-TPO antibodies and TC, LDL, Fasting Insulin, HOMA-IR, Anti-TPO was found to be independently associated with AIP as revealed in Regression analysis, which unequivocally demonstrates the cardiovascular risk in HT.

Conclusion: The findings of the present study point to the implication of thyroid autoimmunity in insulin resistance and dyslipidemia, independent of thyroid function in patients with HT. Thus, the assessment of lipid profile variables and insulin resistance possess value in the treatment and management of HT patients.

Key Words: Hypothyroidism, Thyroid autoimmunity, Anti-Thyroperoxidase antibodies, Hyperlipidemia, Insulin resistance, Cardiovascular disease risk

INTRODUCTION

Hashimoto's Thyroiditis (HT) is a genetic autoimmune disease, characterized by the destruction of thyroid cells by cell- and antibody-mediated immune responses[1] and is regarded as the commonest cause of hypothyroidism. HT has a prevalence rate of 1-4% and found to be more common in women and increases with age.[2,3] Elevated circulating antibodies to thyroid antigens is a characteristic feature in HT patients, of which anti-thyroid peroxidase antibodies (anti-TPO) being the most specific and sensitive for the diagnosis of the disease.[2] Several studies have found that hypothyroidism is associated with insulin resistance, dyslipidemia and chronic inflammation and in turn, increases the risk for atherosclerosis.[4,5] Though the exact mechanism of the atherosclerotic process in hypothyroidism remains to be delineated, few studies suggest the role of thyroid autoimmunity in atherosclerosis, independent of thyroid function.[6-8] Inflammation observed in HT may induce alterations in lipid metabolism, contributing to the increased risk of atherosclerosis.[9] Few studies have reported insulin resistance in hypothyroid state[10,11], whereas, a few other studies failed to demonstrate the relationship.[12,13]

Corresponding Author:
Dr. Sumathi S, Professor and Head, Department of Biochemistry, Mahatma Gandhi Medical College and Research Institute, Pillaiyarkuppam, Puducherry, India; Mobile : +91 9345006041; E-mail: sumathi.bio21@gmail.com

ISSN: 2231-2196 (Print) **ISSN:** 0975-5241 (Online)

Received: 05.10.2020 **Revised:** 23.11.2021 **Accepted:** 28.12.2021 **Published:** 07.05.2021

Original Article

DOI: 10.7860/JCDR/2015/14122.6366

Internal Medicine Section

Role of Pleural Fluid C-Reactive Protein in the Aetiological Diagnosis of Exudative Pleural Effusion

PRAVEEN RADHAKRISHNAN[1], S MATHANRAJ[2]

ABSTRACT

Introduction: Pleural effusions, the result of the accumulation of fluid in the pleural space, are a major diagnostic problem due to its anatomical nature with no direct access. There is variation in management, depending on the pleural disease. The pleural effusion can either exhibit specific or nonspecific characteristics.

Aim: To determine the clinical significance and diagnostic role of pleural fluid C-Reactive Protein (CRP) level in the aetiological diagnosis of exudative pleural effusion.

Materials and Methods: This was a cross-sectional study performed during the study period of September 2013 to December 2014. A total of 53 Patients identified with pleural effusion were recruited in the study and pleural fluid was subjected for the measurement of CRP level. Pleural fluid CRP was assessed with CRP-Turbilatex-Quantitative turbidimetric immunoassay method which is based on the principle agglutination reaction. The data was subjected to statistical analysis using Epi Info software version 3.4.3. The Receiver Operating Characteristic (ROC) curve was plotted to illustrate the diagnostic ability. The smallest cut-off value was the minimum observed test value minus 1, and the largest cut-off value was the maximum observed test value plus 1. All the other cut-off values were the averages of two consecutive ordered observed test values.

Results: Among the 53 patients in the study, 42 had exudative effusions (79.20%) and 11 had transudative effusions (20.80%). The common cause of exudative effusion was tuberculosis 28 (61.90%), followed by 9 malignancy (21.40%) and 7 parapneumonic effusion (16.70%). In our study, the pleural fluid CRP was statistically significant ($p<0.001$) marker to differentiate exudative effusions with CRP-value <30 suggestive of malignancy, CRP-value 30-50 mg/L suggestive of tuberculosis and CRP-value >70 mg/L suggestive of parapneumonic effusions.

Conclusion: Determination of pleural fluid CRP is a useful diagnostic marker for differentiating exudative and transudative effusions. Also, Pleural fluid CRP is a statistically significant marker in differentiating tubercular effusions from nontubercular exudative effusions.

Keywords: Parapneumonic effusions, Pulmonary tuberculosis, Thoracentesis

INTRODUCTION

Pleural effusions are abnormal collection of fluid in the pleural space, manifestated in pulmonary, pleural or extra-pulmonary disease [1]. Approximately, 0.1 to 0.2 mL/kg of fluid produced in the pleural leaves facilitates the normal pleural movements. In certain clinical conditions there might be imbalance between the production and reabsorption of this fluid which may eventually leads to pleural fluid collection. Mechanisms of pleural effusion includes increased hydrostatic pressure, decreased oncotic pressure and increased permeability in the microvascular circulation in association with increased negative pressure in the pleural space followed by separation of pleural leaves, decrease in lymphatic drainage capacity and transition from the abdomen to the thorax [2,3].

Diagnostic approaches in pleural effusion include, Radiology (conventional radiography, ultrasonography, computerized tomography), Thoracentesis (pleural fluid analysis), closed pleural biopsy and video assisted thoracoscopic biopsy. Currently, Light's criteria are being used to differentiate pleural fluid into transudates and exudates. However, exudative effusions are further commonly classified into tubercular, parapneumonic and malignant effusions. As of now pleural fluid Adenosine Deaminase (ADA) is being used for differentiating tubercular effusion from other exudative effusions. There is a specified cut-off for ADA (>45 IU) to suggest tubercular effusions [4,5].

The aetiology of effusions varies according to presence or absence of tuberculosis, to achieve a specific diagnosis, more informative tests are required. Biochemical, microbiologic and cytological analyses of pleural effusion are the fundamental studies to determine the aetiology of the effusion but it is not easy to find the main cause every time. Therefore, several biomarkers have been suggested to help in differential diagnosis. Procalcitonin, Amyloid A and CRP are well known acute-phase proteins and the results of these have lately been proposed to use for differentiation of infectious diseases from other origin of pleural effusion [6].

A number of markers are being currently tested, of which pleural fluid CRP levels have gained attention. As of now very few studies have focused on CRP levels in pleural effusion [7-9]. Increased production of this protein is triggered by cytokines; IL6, TNF and IL1, released by inflammatory cells [10]. The current research focused to determine the clinical significance and diagnostic role of pleural fluid CRP level in the aetiological diagnosis of exudative pleural effusion.

MATERIALS AND METHODS

A cross-sectional study was performed during the period of September 2013 to December 2014 with the prior approval from the Institutional Review Board of Sri Manakula Vinayagar Medical College and Hospital, Puducherry with IEC Code No: 61/2013.

Inclusion criteria: The patients who presented to the pulmonary medicine OPD and were diagnosed with the presence of pulmonary infections associated with acute febrile illness, pulmonary infiltrates, purulent sputum and response to antibiotic treatment; identification of the organism in the pleural fluid; or the presence of emphysema, associated with the finding of frank pus in the pleural cavity with pleural effusion were included in the study.

Exclusion criteria: Patients below 10 years of age, patients in emergency ward, critically ill and patients who were not willing to participate in the study were excluded.

Original Article

DOI: 10.7860/IJARS/2021/49877.2580

Anatomy Section

Voluntary Body Donation-Knowledge and Perspectives among Healthcare Workers in Southern India

PRIYADHARSHINI ADIKESAVAN NATTALAM[1], BHAVANI PRASAD CORIPARTHI[2], REMA DEVI RAJAGOPAL[3]

ABSTRACT

Introduction: Cadaveric dissection is an integral part of teaching anatomy. In a developing country like India, where many medical institutions are on the cusp of growth, procuring cadavers leads to a great challenge. The major source of cadavers is unclaimed bodies, followed by a meagre number by the way of voluntary body donation. It is the call of the hour to encourage people to go in for voluntary body donation.

Aim: To document legal and in-depth knowledge and attitude about body donation among healthcare professionals.

Materials and Methods: This was a cross-sectional study conducted during October 2017 to August 2018. A prevalidated, semi-structured questionnaire was used to assess the knowledge and attitude among 75 medical professionals and 75 healthcare assistants at Pondicherry Institute of Medical Sciences, a tertiary care hospital in Pondicherry, India. Data was analysed by descriptive statistics using Statistical Package for the Social Sciences (SPSS) statistical version 21.0 for windows, and results expressed as percentage of the total study population. The Chi-square test was used to compare variables between doctors and healthcare assistants and p-value <0.05 was considered as significant.

Results: Even though 96.7% of healthcare professionals were aware of body donation, only 66.3% doctors had adequate knowledge about legal aspects. This was much low among healthcare assistants (38.7%). All participants accepted that body donation enhances medical advancement, but only 17% of doctors were willing to donate. On the contrary, 47% of doctors and 40% of healthcare assistants expected the general public to donate (p=0.02). Although many influencing factors, 68.7% (75% doctors and 62% healthcare assistants) inferred that religion was not a barrier and participants of extreme ages (22.5 and 22%) were willing to engage in this altruist act. The major psychological frontier was depersonalisation of self by dissection of his or her own body (69% among doctors).

Conclusion: The study revealed that lacunae regarding the legal aspect of body bequeathing prevail among healthcare professionals that need to be curtailed by providing adequate knowledge through seminars and continuing medical education programs aiming to healthcare professionals including healthcare assistants who bridge the gap between the medical professionals and common people. So, the reflection of knowledge and attitude of healthcare assistants are also considered crucial for winning the noble theme of "voluntary body donation." Breaching the psychological barrier, depersonalisation of self and motivation would be the dawn of voluntary body donation.

Keywords: Anatomical act, Body bequest, Healthcare professionals, Psychology

INTRODUCTION

The cadaveric dissection is the epitome of medical education as it fulfils all the domains of learning [1]. In true sense, it facilitates a higher level of learning, that is, perception and interpretation. Because of which cadaveric dissection remains to be the spine of anatomy learning [2]. This "Anatomical Act" was established by many states of India, which helps the medical colleges to procure cadavers for dissection. Unclaimed bodies remain to be the major source of cadavers in medical education and body bequest remains to be meagre [3]. Body donation became sublime because of the lack of awareness among the common public due to superstitions [4]. The medical profession stands still without dissection, but the perception and attitude toward body donation among this community is also questionable.

There is a gap between medical professionals and common people regarding the awareness of body donation [3]. Many factors such as age, religion, cultural variations, personality differences, views regarding death and mortality, body image concerns, and humanitarian values can have an influence on peoples' mindset toward body bequest [5]. A voluntary body donation is an act of conferring one's body for medical teaching and research. It denotes a determined mind and a pious soul dedicated to help humanity through medical sciences [1]. The attitude of potential donors and their relatives toward body donation is the major influencing factor for the procurement of donor bodies.

The prime beneficiary of this noble act are the doctors who should be expected to be beyond social, cultural stigma, and fear of body donation. Many studies were reported to assess the knowledge, attitude, and practice of whole body donation among the people of different social and cultural backgrounds [6,7]. Basic knowledge of voluntary body donation is not suffice in achieving willed individuals into voluntary body donors, it also includes legal knowledge [8].

The study highlights the legal knowledge and attitude regarding whole body donation among the gamut of the healthcare system in India, including the healthcare assistants, whose role is crucial in bridging the lacunae between the doctor-patient relationships.

MATERIALS AND METHODS

This was a cross-sectional study conducted from October 2017 to August 2018, at Pondicherry Institute of Medical Sciences, Pondicherry, India, among healthcare professionals who were medical graduates, postgraduates, superspecialists and healthcare assistants including staff nurses and nursing faculties. As it was designed to assess the in-depth knowledge regarding body donation among healthcare workers, anatomists, and forensic experts, who might be well-aware, were excluded.

The sample size was 150, calculated by the formula N=Z pq/d, P=60%, i.e., anticipated prevalence of adequate knowledge, q=1-p,

Fetomaternal trauma in instrumental deliveries - a retrospective comparative study

Author:

1) Nitya R, Assistant Professor, Department of Obstetrics and Gynecology, Sri Lakshmi narayana Medical College and Hospital, Pondicherry, India.
2) Veena KS, Associate Professor, Department of Obstetrics and Gynecology, Sri ManakulaVinayagar Medical College and Hospital, Madagadipet, Pondicherry, India.
3) R Rajeswari, CMO(SAG), Rajiv Gandhi Govt Maternity Hospital, Pondicherry, India.

Corresponding Author : Dr. Veena KS, Associate Professor, Department of Obstetrics and Gynecology, Sri ManakulaVinayagar Medical College and Hospital, Madagadipet, Pondicherry, India; Email : stykid2003@yahoo.co.uk

Manuscript submitted – 5th July 2020
Peer review completed – 17th August 2020
Accepted for Epub – 7th September 2020

Abstract:

Objective: This study was undertaken to compare the fetomaternal trauma in forceps and vacuum deliveries. **Methods:** 103 forceps and 103 vacuum deliveries considered in this retrospective study. Maternal outcome is assessed in terms of episiotomy extension, vaginal tears, cervical tears, exploration and repair under anesthesia, blood transfusion, vulval hematoma, puerperal pyrexia, and maternal mortality. Fetal outcome is assessed in terms Apgar score, respiratory distress, birth asphyxia, meconium aspiration syndrome (MAS), necrotizing enterocolitis, hypoxic ischemic encephalopathy (HIE), hyperbilirubinemia, infection, duration of neonatal intensive unit (NICU) stay, birth injuries and infant mortality. **Results:** 85% of instrumental deliveries were conducted by consultants and 15% by residents. Decision to delivery interval was significantly lower in forceps compare to vacuum deliveries. Episiotomy extension and vaginal tears were significantly higher in forceps compare to vacuum. There was no significant difference in cervical tears, exploration and repair under anesthesia, blood transfusion, puerperal pyrexia, sepsis and maternal mortality. Apgar score, respiratory distress, birth asphyxia, MAS, necrotizing enterocolitis, HIE, hyperbilirubinemia, infection, duration of NICU stay and infant mortality was not significant between 2 groups. **Conclusions:** Vacuum delivery is associated with less maternal trauma compare to forceps delivery with no difference neonatal outcome. Skill training for instrumental deliveries with modern education tools, simulators and hands on training for residents is need of the hour to achieve maternal and neonatal safety. Reasonable judgment in choosing cases along with skilled operators can reduce unwarranted caesarians in second stage.

Keywords: Maternal outcome, neonatal outcome, respiratory distress, birth asphyxia, episiotomy extension, vaginal tears, cervical tears, 3rd degree perineal tear, complete perineal tear.

Instrumental delivery is safe option for practicing modern obstetrics in second stage of labor. It is an essential skill for practicing obstetrician to reduce maternal and neonatal morbidity in second stage. Complications of delivery and obstructed labor accounted for 9.6% of all maternal deaths worldwide [1]. World has seen decreasing trend in instrumental deliveries with the rise of caesarian section rate. Data from UK [2] stated that, the instrumental deliveries are 10% which has been constant since several years with preference to vacuum delivery. Instrumental deliveries have key role in reducing maternal and fetal morbidity but compare to developed countries it is underused in developing world. The reasons for decreasing trend are being fear of litigation, lack of skill training, availability of

Nitya R, Veena KS, Rajeswari R. Fetomaternal trauma in instrumental deliveries - a retrospective comparative study. The New Indian Journal of OBGYN. 7th September 2020. Epub Ahead of Print.

IJPRP

Indian Journal of Pathology: Research and Practice
Volume 9 Number 1 (Part II), January - April 2020
DOI: http://dx.doi.org/10.21088/ijprp.2278.1483.91220.36

Original Research Article

Study of Association Between Human Epidermal Growth Factor Receptor2/neu Expression With Modified Bloom Richardsons Grading in Breast Cancer at A Tertiary Care Hospital Puducherry

Pooja K[1], Ramya G[2], Erli Amel Ivan[3]

[1]Postgraduate, [2]Associate Professor, [3]Professor and Head, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry, 605107, India.

Corresponding Author:

Ramya G, Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry, 605107, India.

E-mail: ramya2path@yahoo.co.in

Received on 21.03.2020

Accepted on 26.04.2020

Abstract

Context: Breast cancer is the most common malignancy in females. Advancement in cancer management had lead to early detection and treatment of disease. Recently Immunohistochemistry plays an vital role in the classification of breast cancer. Estrogen Receptor/Progesterone Receptor and Human epidermal growth factor receptor/neu (Her2/neu) status provides prognostic and therapeutic information. *Aims:* This study is done to find the association between Her2/neu by immunohistochemistry and various clinicopathological factors in breast cancer. *Study design:* The present study is a cross sectional study. *Material and Methods:* Forty patients who were diagnosed to have carcinoma breast cancer patient underwent Modified radical mastectomy were included in the study. The surgical specimen were then evaluated histopathologically using modified Bloom Richardsons grading and immunohistochemically for Her2/neu markers. *Results:* In the present study most of the cases were aged between 50–60 years. The mean age of presentation was 52.4. The most common histological type were infiltrating ductal carcinoma no special type, constituting 35 (87.5%). Grade II tumours were seen in 57.5%. Her2 was positive in 16 cases (40%), and it was negative in 26 (60%). Among the positive cases 14 cases were of Grade III. Lymphovascular involvement was seen in 15 cases. *Conclusion:* This study emphasize the need of Her2/neu in routine histopathological report in breast cancers. Her2 positivity increased as the tumour Grade increases and also had increased lymphnode involvement, lymphovascular invasion with poor prognosis.

Keywords: Breast cancer; Human Epidermal Growth Factor Receptor2/neu; Tumour grade.

How to cite this article:

Pooja K, Ramya G, Erli Amel Ivan. Study of Association Between Human Epidermal Growth Factor Receptor2/neu Expression With Modified Bloom Richardsons Grading in Breast Cancer at A Tertiary Care Hospital Puducherry. Indian J Pathol Res Pract. 2020;9(1 Part II):234-240.

Introduction

Breast cancer is the most common malignancy in females, every year more than 1 million women are diagnosed with breast cancer.[1] Invasive ductal carcinoma of no special type (NST) is the most common histological type accounts for 60–80% of all cases of breast carcinoma.[2]

IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 20, Issue 1 Ser.6 (January. 2021), PP 01-04
www.iosrjournals.org

Microbial Pattern of Acute Exacerbation of Chronic Obstructive Airway Disease –A South Indian Hospital Based Study.

Dr.S.Arthy[1], Dr.K.Nagarajan[2], Dr.R.Praveen[3], Dr.S.Yuvarajan[4]

[1]*Post graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India.*
[2]*Professor, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India.*
[3]*Assistant professor, Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India.*
[4]*Professor, Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India.*

Abstract:
Background: *Chronic Obstructive Pulmonary Disease (COPD) is a chronic disease which is characterised by persistent airflow limitation and enhanced chronic inflammatory response in the airway of lungs with frequent exacerbation. The etiology and antibiotic sensitivity have been changing over the years. This study determines the microbiological pattern of sputum and antibiotic sensitivity among COPD patients admitted in a tertiary care Hospital.*
Material and methods: *In this cross sectional study, 60 patients admitted with acute exacerbation of COPD were included and sputum culture and sensitivity studied for most common pathogen and antibiotic sensitivity.*
Results: *Klebsiella pneumoniae was the most common organism isolated. Meropenem was the most sensitive antibiotic and most resistant antibiotic is Ampicillin. Males were more commonly affected (66.7%) of which 58.5% were smokers and 41 % were non-smokers, females were 33.3% majority due to biofuel exposure. These results were found to be statistically significant.*
Conclusion: *Klebsiella pneumonia was the most common organism isolated, followed by pseudomonas. Both the organisms were maximally sensitive for meropenem and imipenam, and were more resistant to ampicillin . Selection of antibiotics should be based on local prevalence of bacterial organisms and their sensitivity by sputum culture for faster recovery and decrease in the mortality and morbidity.*
Keywords: *COPD, ACUTE exacerbation, antibiotic resistance, most common organism.*

Date of Submission: 29-12-2020 Date of Acceptance: 10-01-2021

I. Introduction:

Acute exacerbation of COPD (AECOPD) is sustained worsening of the patient's condition, from the stable and beyond normal day-to-day variations, that is acute in onset and necessitates a change in regular medication in a patient with underlying COPD (Rodriguez-Roisin 2000). AECOPD is associated with decline in health related quality of life , major cause of mortality and also of decrease in Forced expiratory volume in 1 second (FEV1), 7ml/yr for mild and 40 ml/yr for moderate to severe disease.[4]

COPD is the third leading cause of death. Infective etiology is the major cause of exacerbation in COPD patients presenting to hospital, among the causative agents 40% are bacterial[1]. Empirical antibiotic treatment leads to resistance to frequently used antibiotic and necessitates use of higher antibiotics. The choice of antibiotic should be based on local bacterial sensitivity pattern.

II. Materials and Method:

A hospital based cross sectional study was conducted in department of General medicine and Respiratory Medicine department in a tertiary care centre, Pondicherry from for a period of 3 months from May 2019 to July 2019. A total of 60 (both male and female) of age > 18 years were included in this study.
Study Location: This was a tertiary care teaching hospital based study done in Department of General Medicine and Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry.
Study design: Hospital based cross-sectional study.
Study Duration: May 2019 to July 2019.
Sample size: 60 patients.

Original Research Article

A study to compare the effect of postoperative analgesia between intraperitoneal instillation of ropivacaine and bupivacaine in laparoscopic surgeries

Jiju Antony A[1], Sanmuga Priya K[2*], Suneeth P Lazarus[3], Suresh Kumar K[4], Suresh Anand B S[5]

[1]Post Graduate, [2]Assistant Profesor, [3]Professor and HOD, [4]Professor, Department of Anaesthesiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.
[5]Associate Professor, Department of Biomedical Engineering, Rajalakshmi Engineering College, Thandalam, Chennai
Email: priyakannan@gmail.com

Abstract

Background: Laparoscopic techniques have revolutionized the field of surgery with benefits that include decreased postoperative pain, earlier return to normal activities following surgery, and fewer postoperative complications. Management of postoperative pain relievers suffering and leads to earlier mobilization, shortened hospital stay, reduced hospital costs, and increased patient satisfaction. Objectives: To measure Postoperative Analgesia of Intraperitoneal Instillation of Ropivacaine and Bupivacaine in Laparoscopic Surgeries by using time to first request of analgesia. **Methodology:** The present study was conducted at Sri Manakula Vinayagar Medical College and Hospital, Pondicherry in the Department of Anaesthesia. The double blinded randomized experimental study was conducted from October 2017 to May 2019.The sample size of 50 study subjects was selected using the mean pain score at 3.6 with 80% power and 95% confidence interval. In each of the group 25 study subjects were allotted based on randomization. All patients were instilled with 30 ml of solution in a standardized manner by the operating surgeon under vision before removal of trocar at the end of the surgical procedure. Group R received 30 ml (0.2%) ropivacaine and group B received 30 ml (0.25%) bupivacaine. The drugs were prepared and given to the investigator who was blind to the identity of drugs. **Results:** Both the study groups were comparable in terms of age, no significant difference was observed between the groups No significant association was observed between pain score and the study groups at 60 and 120 mins . Significant association was seen at 8,12 and 24 hrs **Conclusion :** Pain scores were not significantly different between the study groups till 4 hours, however, higher pain scores were noted in Bupivacaine group thereafter. Also, this difference in pain scores between the study groups after 8 hours was found to be statistically significant.

KEYWORDS: Pain, Vas Score ,Bupivacaine, Laprotomy ,Intrsperitoneal

*Address for Correspondence:
Dr Sanmuga Priya K., Assistant Professor, Department of Anaesthesiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry.
Email: priyakannan@gmail.com

Received Date: 20/06/2020 Revised Date: 13/07/2020 Accepted Date: 23/08/2020
DOI: https://doi.org/10.26611/101515313

Access this article online	
Quick Response Code:	Website: www.medpulse.in
	Accessed Date: 30 September 2020

INTRODUCTION

Laparoscopic techniques have revolutionized the field of surgery with benefits that include decreased postoperative pain, earlier return to normal activities following surgery, and fewer postoperative complications (eg, wound infection, hernia). However, unique complications are associated with gaining access to the abdomen for laparoscopic surgery. Inadvertent bowel injury or major vascular injury is uncommon, but both are potentially life-threatening complications that are most likely to occur during initial access.[1,2,3]

How to site this article: Jiju Antony A, Sanmuga Priya K, Suneeth P Lazarus, Suresh Kumar K, Suresh Anand B S. A study to compare the effect of postoperative analgesia between intraperitoneal instillation of ropivacaine and bupivacaine in laparoscopic surgeries. *MedPulse International Journal of Anesthesiology*. September 2020; 15(3): 140-144. http://medpulse.in/Anesthesiology/index

Case 17009

Eurorad

A case of mitotically active cellular fibroma

Published on 27.10.2020

DOI: 10.35100/eurorad/case.17009
ISSN: 1563-4086
Section: Genital (female) Imaging
Area of Interest: Genital / Reproductive system female
Imaging Technique: MR
Special Focus: Tissue characterisation Case Type:
Clinical Cases
Authors: Dr.Vasanthapriya Janarthanan, Dr.
Anand.A.M., Dr. Elampridhi Padmanabhan, Dr.
Kulasekaran Nadhamuni, Dr. Umamageswari
Amirthalingam.
Patient: 32 years, female

Clinical History:

A 32-year-old, P2 L2, sterilised female presented with complaints of irregular menstrual cycles since 1 year. Per abdomen shows a palpable mass arising from the pelvis of about 28 weeks, with well-defined lower border. On investigation (Cancer Antigen) CA125 -8.9 (N-Normal); (Carcinoembryonic antigen) CEA-4.71(Increased); (Lactate dehydrogenase) LDH-218 (N).

Imaging Findings:

On ultrasound, a well-defined heteroechoic solid abdomino pelvic lesion of size approximately 16.8 x11.4 x17.3cm noted with cystic degeneration and no significant vascularity. Left ovary was not separately visualized.

Contrast enhanced magnetic resonance imaging (MRI) showed a large well defined T1 hypointense (FIGURE 1), T2 hyperintense (FIGURE 2) and heterogeneously enhancing abdominopelvic lesion (FIGURE 3) predominantly solid with few necrotic foci approximately measuring 19.2 x 14.1 x 9.2cm seen, likely to be left ovarian origin as it was not separately visualized (FIGURE 4).

Then the patient was planned for surgery with intraoperative frozen section which was suggestive of ovarian fibroma with unknown malignant potential. Hence proceeded with hysterectomy with bilateral salpingo opherectomy.

Intra operatively, a 18 x 12cm left ovarian solid tumor was found (FIGURE 5a,b).

Postoperative histopathological examination confirmed the diagnosis as ovarian cellular fibroma with mildly enlarged nuclei and occasional mitotic figures (4/10 high power field HPF) (FIGURE 6,7). No evidence of necrosis.

Discussion:

Fibroma is the most common benign ovarian tumour, approximately comprising 4 % of all ovarian neoplasms. It affects any age group of patients who usually presents with abdominal mass and irregular menstrual cycles. The cellular fibroma is usually a solid, unilateral tumor of uncertain malignant potential which depends on cellularity, mitotic activity and nuclear atypia [1]. It was classified into benign fibroma and malignant fibrosarcoma previously. [2]. In some studies, patients with ovarian fibroma were found to have elevated tumour marker i.e. CA-125. Surgical removal of only solid ovarian tumours is recommended because of the low probability of malignancy.

Case 17017

Eurorad

Loculated pseudomyxoma peritonei – an imaging mystery

Published on 28.10.2020

DOI: 10.35100/eurorad/case.17017
ISSN: 1563-4086
Section: Abdominal Imaging
Area of Interest: Genital / Reproductive system female
Peritoneum
Imaging Technique: CT
Case Type: Clinical Cases
Authors: Umamageswari Amirthalingam1, Elamparidhi Padmanaban1, Yash Kumar Achantani1, Rajkumar Subramaniam2, Pugazhendhi Sambath1, Kulasekaran Nadamuni1
Patient: 44 years, female

Clinical History:

A 44-year-old female presented with abdominal distension of 2 months duration which is insidious in onset and gradually progressive in nature. Physical examination revealed distended abdomen with an ill-defined non tender abdominopelvic mass.CA 125 was 60.1 U/ml.

Imaging Findings:

Plain abdominal radiograph showed an ill-defined mass lesion in right lumbar region and iliac fossa (Figure1). Ultrasound examination revealed an abdominopelvic cystic mass lesion of size about 22 x 20 x 15 cm occupying the right iliac fossa and lumbar region. The lesion showed thick wall and internal septae, low-level internal echoes and scattered calcifications.

Contrast-enhanced Computed Tomography (CECT) showed a multiloculated abdominopelvic mass of size 24 x 20 x 14 cm Linear and confluent calcifications noted (Figure 2). No enhancing solid components (Figure 3). Multiple septae noted, with a maximal thickness of 4 mm (Figure 4). Mass effect was seen over the ascending colon, terminal ileum and right distal ureter with mild hydroureteronephrosis. Minimal ascites noted; no scalloping of hepatic surface (Figure 5). No omental thickening or nodules. Appendix not visualized separately. The findings were interpreted as malignant mucinous cystic right ovarian neoplasm.

Discussion:

Patient underwent cytoreductive surgery. Intraoperative findings: 30 x 30 cm mucinous mass at the appendiceal tip adherent to peritoneum and right ovary (Figure 6). Multiple subcentimeric deposits over the pelvic peritoneum and anterior rectal wall seen. Histopathological examination revealed low grade mucinous neoplasm of appendix and borderline mucinous neoplasm of ovary with pseudomyxoma peritonei (PMP) (Figure 7). Immunohistochemistry revealed CK7 positivity suggesting ovarian origin.

PMP is characterized by accumulation of mucinous ascites within the peritoneal cavity. The incidence is 1-3 in a million cases per year [1].PMP is usually associated with mucinous neoplasm of appendix. However tumours of large and small bowel, ovary, breast, stomach, gallbladder and lung are also known to be associated with PMP. PMP occurs due to rupture of the mucin producing lesion into the peritoneal cavity leading to extensive peritoneal fibrosis, thickening and adhesions. Mucinous ascites, peritoneal, serosal and omental mucinous deposits are also noted.

Case 17615

Eurorad

High grade abdominal lymphoma with secondary pancreatic involvement mimicking tuberculosis

Published on 02.02.2022

DOI: 10.35100/eurorad/case.17615
ISSN: 1563-4086
Section: Abdominal Imaging
Area of Interest: Abdomen Haematologic
Imaging Technique: CT
Case Type: Clinical Cases
Authors: Mohamed Rafi KatharHussain, Rintu George, Anand AM
Patient: 55 years, female

Clinical History:

A 55-year-old female came with the complaints of abdominal pain radiating to back. On abdominal examination, there is a hard non-tender epigastric mass. Complete blood count reveals elevated lymphocytes - 84.6% (reference range 45-75%). Rest of the clinical examination was unremarkable.

Imaging Findings:

A triple-phase Multidetector Computed Tomography (MDCT) shows multiple enlarged predominantly conglomerate lymph nodes in periportal, peri-pancreatic, infra-pancreatic, pre-aortic, bilateral para-aortic, peri-renal, peri-mesenteric, retrocrural, aorto-caval, retrocaval and right iliac fossa region. Many of them shows non-enhancing central necrotic area within. The largest lymph node is in infra-pancreatic region measuring 8.8 x 3.1 cm . Peripancreatic lymphnodes causes compression of ampulla and duodenum leading to mild intrahepatic biliary radical dilatation (IHBRD). The lymph node around the peri-pancreatic region is in close proximity with the head and uncinate process of pancreas with loss of fat plane between the lymph nodal mass and pancreas(arrows in figure 3b). No significant pancreatic duct dilatation seen. Patient was planned for diagnostic laparoscopy with laparotomy which shows multiple conglomeratemesenteric nodes and were taken for biopsy.

Discussion:

Lymphomatous proliferation is defined as clonal malignant proliferation of a mature lymphocyte from a secondary lymphoid structure- a lymph node or an extranodal structure i.e. the spleen and also the structures attached to the mucosa like Peyer's patches [1]. The cause remains unknown but certain lymphomatogenic factors have been identified [2]. Extranodal can involve any organ, while secondary involvement from a disseminated form is most frequent. Isolated pancreatic lymphoma arising from lymphoid elements are extremely rare, and is defined by certain clinical criteria like normal leukocyte count, absence of palpable superficial lymphadenopathy, no enlargement of mediastinal nodes, predominance of pancreatic mass with peripancreatic lymphnodes and absent hepatic or splenic involvement [3]. Alimentary canal involvement occurs in 10-30% of cases of Non- Hodgkin's lymphoma. The stomach is the most frequent site of extranodal lymphomas [4]. Pancreatic lymphoma are rare, representing less than 1% of NHL. [5, 6].

Case 17649

Eurorad

Cecal diastatic perforation due to descending colon adenocarcinoma

Published on 08.03.2022

DOI: 10.35100/eurorad/case.17649
ISSN: 1563-4086
Section: Abdominal imaging
Area of interest: Abdomen Gastrointestinal tract
Imaging Technique: Abdomen
Imaging Technique: Gastrointestinal tract
Case Type: Clinical Cases
Authors: Mohamed Rafi Kathar Hussain, Rintu George
Patient: 72 years, male

Clinical History:

A 72-year-old male patient came to outpatient department with complains of abdominal pain, vomiting and constipation for the past 4 days. Clinical examination revealed moderate abdominal distension with mild guarding and tenderness in the right iliac fossa region. Laboratory investigation showed elevated white blood cell count with neutrophilia.

Imaging Findings:

Plain radiography revealed multiple air-fluid levels in small and large bowel loops extending up to the left colonic flexure, suggestive of large bowel obstruction(Fig. 1). The following day, emergency non-contrast CT scan (NCCT) of the abdomen was done, which showed midline distended cecum with luminal diameter measuring 9.6cm with associated dilatation of ascending and transverse colon and collapsed recto-sigmoid bowel loops. (Fig.2a). NCCT was done because patient had deranged renal function. Signs of small gaseous collection were noted within the caecal wall, leading to the diagnosis of pneumatosis coli. There was not any abnormal ceacal wall thickening or gas in the intestinal vessels (Fig. 2b). Heterogeneous/irregular intraluminal soft tissue density mass lesion of size 3.7 x 3.9 cm was noted in the mid descending colon with associated mild peri-colonic fat stranding (Fig.3a, 3b). Gross pneumoperitoneum (Fig 4a, 4b)was noted inperi-hepatic, perisplenic and peri-colic region with minimal fluid collection in right iliac fossa.The patient underwent emergency laparotomy which confirmed a mass in the descending colon (Fig5a, 5b) associated with cecal perforation (Fig 5a). Left hemicolectomy, transverse colon to rectum end to side anastomosis, cecal closure and loop ileostomy was done. Histopathology report confirmed well-differentiated adenocarcinoma of descending colon (Fig 6).

Discussion:

Gastrointestinal tract perforation is one of the most common surgical emergencies with a reported mortality ranging from 30 to 50% [1]. About 15–30% of colorectal cancer (CRC) patients can present with acute abdominal symptoms due to perforation, bleeding and obstruction [2]. The perforation incidence in case of CRC ranges from 2.6% to 10% [3]. Bowel perforation usually occurs at the maximal site of bowel distension, in certain conditions perforated bowel loop may be so distant from the underlying cause of the bowel obstruction. Perforation occurring at the site of tumour is seen in 70% of cases and colonic perforation occurring proximal to the tumour site is seen in around 30% of cases [4]. Perforation occurring proximal to the colonic mass is called as diastatic perforation. It is due to overdistension and blow out of cecal wall [5]. The typical radiologic triad is massive pneumoperitoneum, marked cecal dilatation and large bowel obstruction. In spite of perforation, cecum is dilated which is astonishing [6]. According to the Laplace law, the tube which has the largest diameter requires the least amount of pressure for distension. So, in case of distal large bowel obstruction, with competent ileocecal valve, the cecum is the most common site of perforation [7]. Peritoneal contamination is usually localized in case of tumour site perforation. While

IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 19, Issue 11 Ser.7 (November. 2020), PP 29-34
www.iosrjournals.org

Clinical profile of hypoglycemiain type 2 diabetes mellitus patients

Dr.Kailash.C[1], Dr.Badrinath.A.K[2], Dr.SureshBabu.S[3]

[1] *Post Graduate, Department of General Medicine, SMVMCH, Pondicherry.*
[2] *HOD and Professor, Department of General Medicine, SMVMCH, Pondicherry.*
[3] *Assistant Professor, Department of General Medicine, SMVMCH, Pondicherry.*

Date of Submission: 08-11-2020 Date of Acceptance: 21-11-2020

I. Introduction

Currently, we are experiencing an epidemic growth in the number of people with diabetes worldwide.[1] An estimated 366 million people, corresponding to 8.3% of the world's adult population, have diabetes today, but the prevalence is expected to grow to 552 million by 2030, corresponding to 9.9% of the adult population.[2] This increase goes hand in hand with "westernization" of lifestyle, with consumption of more energy-dense food and decreasing physical activity.[2] Driven by this development, diabetes affects more and more young people. These changes have driven a huge increase in T2DM —the most common form of diabetes, particularly in young people, especially in their working age.[3] The medical burden is rising as patients with diabetes are developing a growing number of metabolic and cardiovascular comorbidities.[4] The growing economic burden in complex socioeconomic structures becomes obvious.[5] The continuation of the diabetes epidemic is predicted, and the World Economic Forum foresees the epidemic as a disaster likely to continue to worsen in the foreseeable future with a significant impact on global economic growth at least similar in scale to the recent banking crisis.[6] The glycosylated hemoglobin goal according to ADA guidelines is below 7.0% but should be individualized based on factors such as age and life expectancy, co-morbid conditions, and hypoglycemia unawareness.

Exercising during the evening hours increases the risk of nocturnal hypoglycemia, which may occur up to 4 to 6 hours after an exercise bout.[4] To decrease the likelihood of this response during the night (or day), the patient with diabetes may need to reduce his or her insulin dose or increase carbohydrate intake before or after exercise.[5] Recognize the signs and symptoms of hypoglycemia. These include heart palpitations, confusion, weakness, and visual disturbances. If hypoglycemia is left untreated, it could lead to unconsciousness or convulsions. To reduce the likelihood of complications, patients with diabetes should always carry a form of fast-acting carbohydrate (e.g., juice, candy, and glucose tablets), exercise with a partner, and wear a diabetes identification tag. Monitor for symptoms of hyperglycemia. These include excessive thirst; frequent urination; blurred vision; itchy, dry skin; and a fruity odor or breathe. Hyperglycemia can lead to diabetic coma.[4]

The pursuit of strict glucose control is frequently hampered by concerns over hypoglycemia. Hypoglycemia requiring third-party assistance is common in the course of type 2 diabetes therapy and occurs with a frequency of approximately 35 episodes per 100 patient-years among insulin-treated patients.[7] Hypoglycemia occurring during treatment has been associated with several adverse events, including increased mortality,[8,9] higher risk of dementia,[10] falls,[11,12] fall related fractures,[13] cardiovascular events,[14] and poor health-related quality of life.[15] In particular, the relationship between hypoglycemia and subsequent cardiac events warrants attention. There are a number of plausible mechanisms by which acute hypoglycemia may trigger ischemia, arrhythmia, and cardiovascular events.[16] Hypoglycemia increases the levels of counter regulatory hormones, such as epinephrine and norepinephrine, which may induce increased cardiac rate and/ or contractility, heightening myocardial oxygen consumption, while also precipitating vasoconstriction and platelet aggregation.[16] Acute hypoglycemia in the presence of hypokalemia prolongs cardiac repolarization, increases the QT interval, favoring a proarrhythmic state. One study of type 1 and type 2 diabetic patients who presented to the hospital with severe hypoglycemia documented frequent hypokalemia, QT prolongation, and severe hypertension during the hypoglycemic events.[17]

Type 2 diabetes mellitus patients between age group 30-65 years admitted as in patients in SMVMCH with other associated factors are assessed for their hypoglycemic episodes and the frequency of hypoglycemia are correlated with other parameters. This study is mainly done in the view of "Hyperglycemia is a serious problem, Hypoglycemia is a fatal condition".

IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 20, Issue 1 Ser.2 (January. 2021), PP 42-44
www.iosrjournals.org

Anti-Seizure Medication Induced Seizure–A Case Report

Dr Araveinth.G [1]*, Dr A.K. Badrinath[2] Dr S.Suresh Babu [3]
[1]*Post Graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital*
[2]*MD General Medicine, Professor and Head of the Department, General Medicine, SMVMCH*
[3]*MD General Medicine, Assistant Professor, Department of General Medicine, SMVMCH*
**Corresponding Author*

Abstract:
Seizure-inducing effects have been observed in the treatment of Epileptic patients with anti epileptic drugs.The paradoxical increase may occur as a result of different mechanisms.Oxcarbazepine,a structural derivative of Carbamazepine is used as an anti-convulsant drug and mood stabilizing agent.
Hyponatremia is seen in patients on oxcarbazepine, but symptomatic hyponatremia is rare in patients on oxcarbazepine.Here we present a case of a 65 year old male with Seizure disorder with old CVA and systemic hypertension who was on oxcarbazepine therapy developed further increase in seizures and worsening mental status secondary to Severe hyponatremia.

Keywords: *Seizures, oxcarbazepine ,hyponatremia*

Key messages: *certain drugs like oxcarbazepine which is used in the treatment of epilepsy can itself cause seizures due to hyponatremia.*

Date of Submission: 26-12-2020 Date of Acceptance: 07-01-2021

I. Introduction:

Seizure-inducing effects are noted in patients with antiepileptic drugs (AED).

Some of the drugs associated with increasing seizure activity are valporate,carbamazepine and phenytoin. Oxcarbazepine (OXC)is a keto analog of carbamazepine(CBZ) is used as an antiepileptic agent and in bipolar disorder because of its mood stabilizing properties.There are some studies showing paradoxical increase in seizure activity in patients on oxcarbazepine therapy. This could be possibly explained by its mechanism of action as sodium channel blocker. Here we present a known case of seizure disorder who was on oxcarbazepine therapy developing further increase in seizures secondary to severe hyponatremia.

II. Case Report:

A 65 years old male patient who is a manual labourer presented with Complaints of one episode of seizures few hours before admission to hospital. It was a generalised tonic clonic seizure lasting for five minutes involving all 4 limbs with frothing from mouth and post ictal confusion present. Patient had two episodes of Seizures previous day.He also had complaints of persistent hiccoughs ,headache,giddiness and generalized fatigue for the past 2 days.Patient is a known case of Seizure disorder for the past two years on treatment with tab.Oxcarbazepine 600mg Twice daily.He is also an hypertensive on tab. Amlodipine 5mg OD and had a history of CVA with left hemiparesis 3 years back and gradually improved with antiplatelets.

On examination patient in altered sensorium, afebrile, pulse–90/min. regular, BP-130/70mmHg and SPO2-98% in room air. Cardiac and respiratory system examination were normal. Central nervous system – Patient in altered sensorium, spontaneous eye opening present, responded to pain, moved all limbs, deep tendon reflexes were normal and plantar extensor on left and flexion on right side. No signs of meningeal irritation.

His complete haemogram, renal function tests, thyroid function test and Urine routine examination were normal.His serum electrolytes revealed hyponatremia With sodium –105meq/lit ,potassium - 3.0meq/lit,chloride_73meq/lit and bicarbonate_19meq/lit.Serum osmolality was 273 mmol/lit and urine osmolality was 153mmol/lit.Urine spot sodium was37.7meq/lit and spot potassium16.5meq/lit. A Computed tomography of the brain was done to rule out any lesion in the brain and it Showed age related atrophic changes.

Patient was started on intra venous hypertonic saline (3%NaCl) infusion and oral free water restriction for correction of hyponatremia. Patient was continuing the medications which he was taking prior to admission.Patient was later started on tab.Tolvapton15mg OD. Despite treatment patient had persistant hyponatraemia and developed another episode of seizure on day 2 of admission. On day 3 of admission after stopping tab.oxcarbazepine patient serum sodium level gradually improved and patient sensorium improved and was seizure free.Patient serum sodium level was normal after stopping hypertonic saline infusion and tab.tolvapton.Patient was started on tab.phenytoin100mg BD and discharged.After one month of discharge

International Journal of Research and Review
Vol.7; Issue: 10; October 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

Prevalence of Cirrhotic Cardiomyopathy and Correlation with Child-Pugh Score

Uthaya Sankar M.K[1], Sibi Chakravarthy C.[2], Louis Ferdin Zeno J.[3], Thirumal P[4]

[1]Professor, [2,3]Post graduate resident, [4]Assistant Professor
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Corresponding Author: Sibi Chakravarthy C.

ABSTRACT

Background: The deterioration of cardiac function in patients with liver cirrhosis has been a great debate for past two decades. A newer entity called "Cirrhotic Cardiomyopathy" has been described which includes a variety of features like QT prolongation, systolic and diastolic dysfunction. This is of extreme importance since cardiac function plays a major role in mortality and morbidity of the patient.

Aim: To assess the prevalence of cirrhotic cardiomyopathy and to assess its correlation with Child Pugh score.

Methodology: A hospital based cross sectional study was conducted in department of general medicine and department of gastroenterology. The study period was one and a half years after obtaining approval from the ethical committee. The study population was 93 and the patients admitted in general medicine and gastroenterology were enrolled for the study.

Results: 44.4% patients were in age group 31-45, 69% had abdominal distension as chief complaint, 77.4% patients were alcoholics, 61.3% of patients had features of liver cell failure and 54.8% were in hepatic encephalopathy. 45.2% patients were under Child B and 45.2% under Child C. 77% of patients had features of cirrhotic cardiomyopathy of which 49.9% were child C. 56% patients had diastolic dysfunction. Systolic dysfunction was found in 30.1% patient which had a statistical significance of 0.02. While comparing with Child Pugh score diastolic dysfunction was significant with a p value of 0.035 considering the variables taken in the study Albumin and INR values were statistically significant with a p value of 0.038 and 0.043 respectively.

Conclusion: Our study showed a staggering rise in the presence of cirrhotic cardiomyopathy in patients with end stage liver disease when compared to previous studies. Presence of systolic dysfunction was statistically significant, whereas on correlating with Child Pugh score only diastolic dysfunction was significant.

Keywords: cirrhotic cardiomyopathy, liver cirrhosis, Child Pugh score

INTRODUCTION

Chronic liver disease is a pathological entity which is associated with a spectrum of clinical manifestations. Cirrhosis is the end result of all chronic liver disease. Interactions between the functions of the heart and the liver have been described, with liver diseases affecting the heart, heart diseases affecting the liver, and conditions that simultaneously affect both. Results of experimental and clinical studies have shown impaired myocardial contractility as well as electrophysiological abnormalities in patients with cirrhosis[1]. Alcohol being one of the most common causes of liver cirrhosis can itself cause cardiomyopathy, which is termed as "Alcoholic cardiomyopathy". These abnormalities were initially thought to be a manifestation of alcoholic cardiomyopathy. But in the mid 1980's, studies in nonalcoholic patients and in experimental animal models showed a similar pattern of

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
Original Research Article E-ISSN: 2349-9788; P-ISSN: 2454-2237

A Study of Effect of Anemia over HbA1C Level in Non-Diabetic Patients in a Tertiary Care Hospital in Puducherry

Uthaya Sankar M.K[1], Sivaram A[2], Louis Ferdin Zeno.J[3], Asmathulla.S[4]

[1]Professor and Unit Chief of Medicine, [2,3]Postgraduate residents, [4]Professor of Biochemistry, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India

Corresponding Author: Sivaram A

ABSTRACT

HbA1c assay is as an accurate and precise measure of chronic glycemic levels as it correlates well with the risk of diabetes complications for the same reason it is recommended to rely on HbA1c for diagnosing diabetes. [2] Falsely elevated HbA1c concentrations are encountered when there is increased circulating erythrocyte life span (decreased red cell clearance) or impaired reticulocyte production. [3] Anemia is most common factor in Indian population affecting the level of HbA1C. Therefore it's necessary to know whether anemia due to any etiology will affect the level of HbA1C level in non-diabetic patients.

Keywords: Anemia, HbA1C

INTRODUCTION

Hemoglobin A1C (HbA1c) is the predominant hemoglobin found in HbA1 fractions and it constitutes 5% of the total hemoglobin in normal adults and up to 15% in patients with diabetes mellitus [1]. Hgb A to HbA1c conversion takes place during the entire life span of the red blood cell and the rate of this reaction is faster in diabetics because of the higher prevailing glucose concentration, resulting in a higher concentration of HbA1c. Red blood cells (RBC) are freely permeable to the plasma glucose molecules, and hemoglobin is practically exposed to the same glucose concentrations as plasma. Therefore, HbA1c level is directly proportional to average blood glucose concentration over the previous 4weeks to 3 months or the average lifespan of the erythrocyte.

There are a number of methods available to estimate glycated hemoglobin like immunoturbidimetry, ion exchange high-performance liquid chromatography (HPLC), boronate affinity, and enzymatic method. HbA1c assay is as an accurate and precise measure of chronic glycemic levels as it correlates well with the risk of diabetes complications for the same reason it is recommended to rely on HbA1c for diagnosing diabetes [2]. Despite its benefit, HbA1c is affected by a variety of genetic, physiological, hematological and illness related factors.

Falsely elevated HbA1c concentrations are encountered when there is increased circulating erythrocyte life span (decreased red cell clearance) or impaired reticulocyte production [3]. Out of these factors affecting the level of HbA1C , most common entity in Indian population is anemia out of which most common type iron deficiency anemia has showed impact in HbA1C value in non diabetic individuals [4].

Therefore it's necessary to know whether anemia due to any etiology will affect the level of HbA1C level in non-diabetic patients for whom accurate analysis of glycemic status is necessary. So this study was done to estimate the HbA1C level

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Case Report

Stuck Mitral Valve Thrombosis Presenting as Embolic Stroke Following Thrombolysis- A Case Report

Uthaya Sankar M. K[1], Rangarajan D.V[2], Louis Ferdin Zeno. J[3]

[1]Professor and Unit Chief, [2,3]Postgraduate residents,
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India

Corresponding Author: Uthaya Sankar M. K

ABSTRACT

Prosthetic valve thrombosis is one of the major causes of primary valve failure, which can be life-threatening. Although surgery is the first-line treatment modality in symptomatic Prosthetic valve thrombosis, thrombolytic therapy has recently evolved as an effective substitute to surgery. Cerebral embolism can occur in 5-6% of left sided valve thrombus and this is a case of Prosthetic mitral valve thrombosis presenting as acute ischaemic stroke after Thrombolysis due to Thromboembolism.

Keywords: Prosthetic valve Thrombosis, Thrombo-embolism, Acute Ischaemic Stroke

INTRODUCTION

Prosthetic valve thrombosis (PVT) is a rare but serious complication of valve replacement, most often encountered with Mechanical prosthesis.[2] PVT is an obstruction of a prosthesis by noninfective thrombotic material. The most common cause of PVT is inadequate anticoagulant therapy. Unfortunately, vitamin K antagonists are still the only approved oral anticoagulants in patients with heart valve prostheses. Even with the use of Vitamin K Antagonists, the risk of thromboembolism is 1%–2% per year, but the risk is considerably higher without or inadequate treatment with warfarin.[3] Significant morbidity and mortality associated with this condition warrants rapid diagnostic tests. The different therapeutic modalities available for Prosthetic Valve Thrombosis (Heparin treatment, fibrinolysis, surgery) will be largely influenced by the presence of valvular obstruction, by valve location (Left- or right-sided), and by clinical status.[2]

CASE REPORT

This is a case of 23 years old female who is a K/C/O Mitral valve prolapse for which Mitral valve replacement (St. Jude's valve) done, 4 years ago, presented with chief complaints of difficulty in breathing for 3 days, Class III-IV NYHA, with orthopnea and history of cough with Expectoration. No history of fever, chest pain, limb swelling present. She was on irregular Oral anticoagulation medications. No other comorbidities. General examination was normal. Vitals - Pulse Rate- 110 bpm, BP- 80/50mmHg, RR- 32/min, SPO2- 92% at Room Air. Cardiovascular system examination - S1, S2 heard and Valve click not heard in mitral area. Respiratory system examination revealed Fine end Inspiratory Crepitations in Bilateral Infra-Axillary and Infra-Scapular areas. Central nervous System revealed No Focal Neurological deficit. Abdomen examination – Soft, non-tender, No organomegaly.

Investigations showed PT INR value of 1.5. Chest X-ray revealed Cardiomegaly with ill defined homogenous opacities present in Bilateral lung fields(fig1-thin

Original Research Article

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

The Study of Serum Gamma Glutamyl Transferase Level in Patients with Metabolic Syndrome

Uthaya Sankar M K*, Nagabhushan.D, Louis Ferdin Zeno.J***, Gayathri****

*Professor, **Assistant Professor, ***Post Graduate,
Department of General Medicine, Sri Manakula Vinayagar Medical College & Hospital, Pondicherry-605107

Corresponding Author: Nagabhushan.D

ABSTRACT

Gamma Glutamyl Transferase (GGT) belongs to Transferase enzymes. It is used as a diagnostic marker for liver disease.[1] Gamma Glutamyl Transferase was found to elevated in Metabolic Syndrome patients along with mildly elevated liver enzymes to the upper limit. The aim is to study the level of Serum Gamma Glutamyl Transferase in Metabolic Syndrome patients and to analyse for any association between serum GGT levels and parameters of Metabolic Syndrome. The study population is of 114 who are diagnosed as Metabolic Syndrome. Waist circumference, Body Mass Index (BMI), blood pressure, lipid profile, liver function test, fasting blood glucose of the subjects were recorded. Mean serum Gamma Glutamyl Transferase was 92.7 ± 52.5. An elevated GGT was found to be associated with Metabolic Syndrome subjects. Also there was a positive correlation between GGT and waist Circumference, triglycerides, erythrocyte sedimentation rate, liver function test.

Key words: Gamma Glutamyl Transferase, metabolic syndrome, waist circumference, triglycerides.

INTRODUCTION

The Metabolic Syndrome is a group of metabolic abnormalities that confers increased risk of cardiovascular diseases and diabetes mellitus[1]. The major features of the metabolic syndrome include central obesity, hypertriglyceridemia, low high-density lipoprotein, cholesterol, hyperglycemia, and hypertension.[1] The raise in the prevalence of obesity in India is threatening to increase the burden of Atherosclerotic cardiovascular disease (ASCVD).

The prevalence of metabolic syndrome worldwide is 20-25%.[2,3] There has been a consistent effort to evaluate biochemical markers to predict an early onset of Metabolic Syndrome and subsequently intervene appropriately by means of lifestyle changes and drug therapy and thereby reduce cardiovascular morbidity and mortality. Studies are lacking in the adult Indian population.

Markers like adiponectin have been studied as a measure of increased adipose but have not proven to be cost effective and easily available. Clearly a cost effective and easily available marker is required to predict an early onset of this syndrome. Gamma Glutamyl Transferase (GGT) is one such marker which is cost effective, easily available[3].High levels of GGT have been associated in populations with increased risk of Atherosclerotic cardiovascular diseases (ASCVD) [2,6]. Several prospective studies reported that baseline serum GGT concentration was an independent risk factor for the development of coronary artery disease (CAD), diabetes mellitus, stroke and hypertension[7].The purpose of this study is to evaluate the utility of GGT as an early marker in Metabolic Syndrome.

Objective

1. To study the level of Serum Gamma Glutamyl Transferase in Metabolic Syndrome patients.

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Case Report

Hodgkin's Lymphoma Presenting as Paraplegia: A Case Report

Uthaya Sankar M.K[1], Sivaram A[2], Louis Ferdin Zeno.J[3], Suman Babu.I.S.S[4]

[1]Professor and Unit chief, [2,3]Postgraduate residents, [4]Assistant Professor, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India

Corresponding Author: Sivaram A

ABSTRACT

Hodgkin's lymphoma is a malignancy of mature B lymphocytes which has Bimodal distribution of age at diagnosis and presents as palpable, non-tender lymphadenopathy. Neurological manifestations are rare complication of Hodgkin's disease (0.2%) and this is a case of Hodgkin's lymphoma which presented primarily with paraplegia as a neurological deficit caused by spinal cord compression.

Keywords: Hodgkin's lymphoma, paraplegia, neurological deficit.

INTRODUCTION

Hodgkin's lymphoma (HL) is a malignancy of mature B lymphocytes and represents 10% of all lymphomas diagnosed each year. The majority of HL diagnosis is classical HL (cHL). A bimodal distribution of age at diagnosis has been observed, with one peak incidence occurring in patients in their twenties and the other in those in their eighties. Most patients with cHL presents with palpable lymphadenopathy that is non-tender in most of the patients, these lymph nodes are in neck, supraclavicular area and axilla. More than half of the patients will have mediastinal adenopathy at diagnosis, and this is sometimes the initial manifestation. Subdiaphragmatic presentation of cHL is unusual and more common in older males.[1]

HL is predominantly a disease of the lymph nodes although extranodal sites of disease may be present in 10% of cases. Direct neurologic dysfunction results from intracranial metastases, metastases to the epidural space of the spinal cord with resultant spinal cord or nerve root compression, metastatic leptomeningeal disease, and intramedullary spinal cord metastases.[2]

CASE REPORT

This is a case of a 46 year old male who was apparently healthy 6 month back and then he developed low back ache which was dragging type, intermittent, aggravated on prolonged standing and relieved by taking rest. Then he developed difficulty in walking , initially he had difficulty in using left leg for walking ,climbing stairs ,getting up from squatting position which gradually involved right leg also in a duration of one month. Patient had no involvement of upper limb. The symptoms worsened in next 10 days after which he had decreased sensation of both the lower limb and became completely bedridden. History of walking over cotton wool like sensation present. History of band like sensation around the hip was present. On examinations positive finding were multiple cervical non-tender and non matted lymphadenopathy, bilateral decreased of lower limb with power grading of 0/5, absent abdominal and cremasteric reflex and bilateral extensor Babinski response. The crude touch, pain and temperature where decreased below the level of umbilicus, and absent sensation in perianal region and tenderness over spine in thoracolumbar region.

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Case Report

A Deviant Manifestation of Sarcoidosis: Bilateral Inguinal Lymphadenopathy

Uthaya Sankar M K[1], Swapna U S[2], Sivaram A[3], Mythreini B S[4]

[1]Professor, [2,3,4]Post graduate residents, Department of General Medicine,
Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107.

Corresponding Author: Swapna U S

ABSTRACT

Background: Sarcoidosis is a systemic granulomatous disorder, characterized by involvement of multisystem, frequently involves pulmonary system. Sarcoidosis can have varied presentations. The clinical presentation of sarcoidosis ranges from asymptomatic to organ failure. It is unclear how often sarcoidosis is asymptomatic. Lymph node involvement is found rarely in isolation.

Case Report: A 63-year-old asymptomatic male presented with bilateral pelvic and inguinal lymphadenopathy. An ultrasonogram scan of the abdomen, and pelvis revealed bilateral deep pelvic and inguinal bulky lymphadenopathy. Excision biopsy revealed sarcoidosis. He responded to six months of oral steroid treatment.

Conclusion: This case illustrates the different presentation of sarcoidosis and the difficulty in diagnosing sarcoidosis in its initial stages. A high suspicion and excision biopsy is the key in diagnosing this condition.

Keywords: Sarcoidosis, Lymph nodes, Biopsy

INTRODUCTION

Sarcoidosis is a global disease of unknown etiology. It is an inflammatory disease characterized by the presence of non caseating granuloma with varied presentations thus leading to confusion whether asymptomatic individuals with suspected diagnosis of sarcoidosis should be investigated further. This disease is often multisystem and requires the presence of involvement in two or more organs for the specific diagnosis[1]. The clinical presentation of sarcoidosis varies from asymptomatic to complicated sarcoidosis. Respiratory involvement (> 90 %) is most common[1], but it is non specific in nature with non specific constitutional symptoms. Typical pulmonary manifestations are easily identified.

The typical manifestations of this disease include bilateral hilar lymphadenopathy and pulmonary reticular opacities[2]. The clinical presentation of sarcoidosis depends as age, sex, and race, the duration of the disease and the sites of involvement. Frequency of common organ involvement is lung (90%), skin (24%), eye (12%), extra thoracic lymphnode (15%), liver (12%), Spleen (7%), neurological (5%), cardiac (2%) with Constitutional symptoms like fatigue, fever, night sweats and weight loss[1]. Diagnosis of asymptomatic presentations in sarcoidosis remains a challenge as it can influence prognosis.

CASE REPORT

A 63 year old male presented with swelling over the bilateral inguinal region since 3 months, multiple in number and was non tender, non discharging .History of yellowish discolouration of urine for 7 days, 2 months back. For which patient took native treatment. History of generalized fatiguability and weight loss present. Besides he was a smoker and quitted smoking 3 years back.

The vital signs were stable. In physical examination three non tender

Content available at: https://www.ipinnovative.com/open-access-journals

IP Indian Journal of Immunology and Respiratory Medicine

Journal homepage: www.ipinnovative.com

Original Research Article

Study on assessment of Obstructive sleep apnea (OSA) risk in Obese pregnant women

Durga K[1], S Yuvarajan[2], Praveen Radhakrishnan[2,*], Antonious Maria Selvam[2], Arun Selvaraj[3], Vinod Krishnadas[3]

[1]*Dept. of Obstetrics and Gynaecology, Sri Lakshmi Narayana Institute of Medical Science Medical College & Hospital, Kadapakkam, Puducherry, India*
[2]*Dept. of Respiratory Medicine, Sri Manakula Vinayagar Medical College, Kalitheerthalkuppam, India*
[3]*Dept. of Psychiatry, Sri Manakula Vinayagar Medical College, Kalitheerthalkuppam, India*

ARTICLE INFO

Article history:
Received 16-06-2020
Accepted 09-07-2020
Available online 16-09-2020

Keywords:
OSA
Pregnancy
Obesity
STOP BANG

ABSTRACT

Introduction: Obstructive sleep apnea is a major public health concern which is associated with cardiovascular and cerebrovascular comorbidities. Eventhough association of OSA with adverse fetomaternal outcomes is documented, screening for OSA in pregnancy is a challenging task. So the purpose of our study is to assess the risk of OSA in obese pregnant ladies by using established STOP BANG Questionnaire for OSA.

Materials and Methods: This cross sectional study on assessment of obstructive sleep apnea risk among the obese pregnant women was done in tertiary care centre in the rural population of Puducherry.

Results: 21 obese pregnant women were included in our study. The mean age of our study population was 29.5 years. Most of the study subjects (85.7%) had history of snoring both reported by them and their bed partners. History of tiredness was reported by 14 patients (66.6%).Chocking or history of gasping was reported by only 4 patients (19%). Results of our study showed that 42.9% of the obese pregnant women had high risk, 42.9% had intermediate risk and 14.3% for OSA as per the STOP BANG scoring.

Conclusion: Thus our study subjects were having higher risk of OSA which needed further evaluation with polysomnography. Thus the STOPBANG questionnaire can be used to screen for obstructive sleep apnea (OSA) in obese women during pregnancy.

1. Introduction

Obstructive sleep apnea (OSA) may affect nearly 20 percent of obese pregnant women.[1] Hypertensive disorders of pregnancy, Gestational diabetes mellitus and cardiomyopathy are the major comorbidities associated with OSA in pregnancy. It has been well documented that OSA in pregnancy have 2-fold increased risk of developing preeclampsia and 1.5-3.5-fold increased risk of the developing of gestational diabetes mellitus.[2]

Obstructive sleep apnea is a major public health concern which increases the cardiovascular and cerebrovascular comorbidities. OSA screening is mandatory for specific population which includes obese people, patients with Resistant /poorly controlled diabetes mellitus/hypertension and Chronic kidney diseases. Even though lot of pathophysiological factors increases the risk of OSA in pregnancy, available literature in these group of population is sparse.

Adverse fetomaternal outcomes were well documented in patients with OSA in pregnancy. Hence it is mandatory to screen these patients which is a challenging task. Polysomnography is the gold standard investigation for the diagnosis of OSA but limited by its cost, waiting period in health care setting with significant patient load and time consumption. Unattended level 3 home based sleep studies is emerging as reliable cost-effective method for diagnosing

* *Corresponding author.*
E-mail address: drpraveen@gmail.com (P. Radhakrishnan).

https://doi.org/10.18231/j.ijrm.2020.054

REVIEW ARTICLE

Management of Infertility—Recommendations in the COVID-19 Era

Sendhil C Arumugam[1], Jayasree Manivasakan[2], Syed Habeebullah[3]

Abstract

Worldwide, the incidence of infertility is 15%. In India, the incidence of infertility varies between states ranging between 3.9% and 16.8%. India has 22–23 million infertile couples, and the total fertility rate has declined from 3.9 in 1990s to 2.3 in 2019. At present, the estimated number of *in vitro* fertilization cycles countrywide are around 100,000, and it was expected to reach 250,000 by the end of 2020. But with the COVID-19 pandemic, all these treatments have been brought to a sudden halt. Decision to stop all treatment is because SARS CoV2 is a global health pandemic and infertility treatments are usually electively done. Also we need more studies to show that COVID-19 has no effect on newer pregnancies.

Keywords: COVID, Cross-training, Freeze-all, Infertility.

SBV Journal of Basic, Clinical and Applied Health Science (2020); 10.5005/jp-journals-10082-02253

Introduction

The World Health Organization (WHO) states that one in every four couples in developing nations is affected by infertility. India has 22–23 million infertile couples, and the total fertility rate has declined from 3.9 in 1990s to 2.3 in 2019. At present, the estimated number of *in vitro* fertilization cycles countrywide is around 100,000, and it was expected to reach 250,000 by the end of 2020.[1] As the world faces a pandemic with enormous casualties and an uncertain future for most people, the physicians in reproductive medicine and their patients are faced with newer challenges.

Patients should be informed that considering the rapid community transmission and the lack of symptoms among infected people, frequent visits to the hospital may endanger them and their families. Healthcare workers in fertility centers should understand that high virulence and the sustained surface viability of the virus may cause severe difficulty in keeping the lab surfaces sterile.

Keeping the healthcare workers and their patients a priority, most fertility societies have advised suspension of elective clinical activities. This is highly applicable to infertility workup and procedures. As we have very little information on the effect of COVID-19 on organogenesis (teratogenic ability) and also on perinatal outcome,[2] it is better to withhold fertility procedures. But if women are in the middle of an intervention or a treatment cycle or for fertility preservation before oncology treatment, treatment cycles can be completed with the full counselling and understanding of the implications by the patients.

Recommendations

The following guideline will help decrease the chance of acquiring the infection and help conserve essential resource of healthcare workers.[3,4]

Social Distancing

- All persons entering clinical spaces, both patients and healthcare workers, should be carefully assessed for body temperature and health status.
- Minimize the number of healthcare providers in the clinic.
- Minimize number of patients in the reception and patient waiting area when they come in for urgent procedures.
- Follow social distancing by shifting the OPD practice to the telehealth model either using telephone or computer-based face-to-face office-based consultations.

Travel

- Advise patients to avoid travel to fertility clinics for the sole purpose on non-emergency procedures like egg donation, gestational surrogacy, etc.
- Patients who have had babies delivered through gestational carriers from travel-restricted areas should make alternative care plans for the infants until the travel restrictions are withdrawn.
- For geographically distant patients teleconsultations are recommended to ascertain the need for an appointment.

Clinical Management

- Plan suspension of all new treatment cycles that include ovulation induction, intrauterine inseminations, *in vitro* fertilization, and gamete cryopreservation.

[1,3]Department of Obstetrics and Gynaecology, Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth, Puducherry, India

[2]Department of Obstetrics and Gynaecology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Corresponding Author: Sendhil C Arumugam, Department of Obstetrics and Gynaecology, Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth, Puducherry, India, Phone: +91 9485475508, e-mail: senthilcoumarya@mgmcri.ac.in

How to cite this article: Arumugam SC, Manivasakan J, Habeebullah S. Management of Infertility—Recommendations in the COVID-19 Era. J Basic Clin Appl Health Sci 2020;3(2&3):53–55.

Source of support: Nil

Conflict of interest: None

Drug-Induced Lupus Erythematosus Associated with Proton Pump Inhibitor

Manokaran Chinnusamy[1] Ram Arvind Viswanathan[1] Sathiyanarayanan Janakiraman[1] Roshna Elayidath[1]

[1] Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MD, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, 9, Associate Professor Quarters, SMVMC Campus, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci [NS]2020;10:132–134

Abstract

Drug-induced lupus erythematosus is an autoimmune phenomenon where the drug exposure leads to the development of systemic lupus erythematous like clinical features. Drug-induced lupus erythematosus can be divided into systemic lupus erythematous, subacute cutaneous lupus erythematous, and chronic cutaneous lupus erythematous. Here, we report a case of a 29-year-old female presented with systemic lupus erythematous due to chronic use of proton pump inhibitors, which is considered to be very rare.

Keywords
- drug-induced lupus
- pantoprazole
- proton pump inhibitors

Introduction

Drug-induced lupus erythematosus (DLE) is a rare adverse reaction to a large variety of drugs with features resembling those of idiopathic systemic lupus erythematosus (SLE). It comprises up to 10% of new lupus cases annually.[1] The first case described in 1995 was associated with treatment with sulfadiazine,[2] since then more than 90 drugs have been related to DLE and the number is continuously increasing. Recently proton pump inhibitors (PPIs) have been found to be associated with DLE.[3] The presentation is vague and needs a high index of suspicion resulting in a costly workup. Given that the prognosis is usually good if therapy with offending drug is stopped, it is important to identify this clinical entity promptly.

Case Report

A 29-year-old female patient was admitted to our department with 2 months history of pain in small joints of both upper limb, multiple skin lesions, and painless ulcers on oral cavity. On examination, prominent annular nonscarring erythema was present on the thigh, knees (► Fig. 1), and extensor surface of elbow (► Fig. 2). No other abnormalities were found on physical examination except for tenderness in the metacarpophalangeal joints of bilateral upper limbs and a painless ulcer over the palate (► Fig. 3). Routine investigations were conducted, including a complete blood count, renal function test, urine examination. Since she is a young female in the early reproductive age group, she was screened for connective tissue disorders. The laboratory investigations revealed normal hemogram, liver and kidney function test, and serum electrolytes. Rheumatoid factor was negative. Antinuclear antibody (ANA), antihistone antibody, and anti-dsDNA were positive. Above findings along with lack of systemic involvement raised the suspicion of drug-induced SLE; on further probing of history, we found that she was using pantoprazole tablet for the past 6 months for gastroesophageal reflux disease before her skin lesions appeared. She had no other concomitant diseases and did not take any other drug. She was diagnosed to have drug-induced SLE. The drug was discontinued and tab. hydroxychloroquine 200 mg twice daily and prednisone 0.5 mg/kg/day was started. The therapy was continued for 4 weeks and then the corticosteroid dose was tapered. Complete clearance of skin lesions was noted within 4 weeks of the treatment even the pain over the joints and oral ulcers had healed

Discussion

DLE is a lupus-like syndrome temporally related to continuous drug exposure that resolves upon drug discontinuation. There are currently no standard diagnostic criteria for DLE. Findings include skin manifestations, arthritis, serositis, antinuclear, and antihistone antibodies positivity.[1] Similarly to

published online
September 6, 2020

DOI https://doi.org/10.1055/s-0040-1716601
ISSN 2582-4287.

REVIEW ARTICLE

Cardiovascular Risk in Hashimoto's Thyroiditis: Role of Thyroid Autoimmunity

Rajarajeswari Ranganadane[1], Sumathi Saravanakumar S[2], Srinivasan Abu Raghavan[3], Asmathulla Shafiulla[4], Girija Subramanian[5], Maithili Karpaga Selvi Nachimuthu[6]

Abstract

Hashimoto's thyroiditis (HT) is the most common autoimmune thyroid disease synonymous with hypothyroidism. The link between hypothyroidism and the risk of cardiovascular diseases is of contemporary interest. Studies have indicated the prevalence of metabolic syndrome and endothelial dysfunction in HT patients. HT *per se* might possess a role in atherosclerosis. Association of HT with dyslipidemia and chronic inflammation leading to endothelial dysfunction has been documented. However, the role of thyroid autoimmunity in promoting cardiovascular diseases remains unclear. Further studies unraveling the causal relationship between HT and cardiovascular disease would provide greater insight into the management of atherogenic complications observed in HT patients.

Keywords: Chronic inflammation, Dyslipidemia, Endothelial dysfunction, Hashimoto's thyroiditis.

SBV Journal of Basic, Clinical and Applied Health Science (2021): 10.5005/jp-journals-10082-03106

Introduction

Hashimoto's thyroiditis (HT) is an autoimmune disease characterized by the destruction of thyroid cells by both cell- and antibody-mediated immune responses[1] and is regarded as the commonest cause of hypothyroidism. HT has a prevalence rate of 1–4%. HT is more common in women and increases with age.[2,3] Several studies have shown the association of hypothyroidism with dyslipidemia and chronic inflammation, which in turn enhances the risk for cardiovascular diseases.[4] A marked increase in low-density lipoprotein (LDL) is seen in hypothyroidism, attributed to decreased LDL receptors in the liver culminating in reduced LDL clearance.[5,6] Hyperlipidemia and chronic inflammation are implicated in atherosclerotic lesion formation. The levels of major inflammatory markers, such as interleukin (IL) 6, tumor necrosis factor-alpha (TNF-α), and high sensitive C-reactive protein (hs-CRP), were found to be elevated in HT patients.[7] Though cardiovascular risk seen in overt hypothyroidism is a well-established fact, the influence of thyroid autoimmunity in increasing the cardiovascular events independent of thyroid dysfunction still remains a conundrum. Few studies suggest a putative role of thyroid autoimmunity in atherosclerosis development independent of thyroid dysfunction. Chronic inflammation and endothelial dysfunction could be the link. Cytokines are believed to modify epithelium thereby allowing infiltration of the thyroid by immune cells: a mechanism underlying HT.[8] Thus, the purpose of this review is to primarily provide the discerning researchers an overall picture of cardiovascular risk seen in HT patients, which might be a great source of help in the management.

Dyslipidemia and Hashimoto's Thyroiditis: the Nexus

Dyslipidemia as observed in thyroid abnormalities is a potent risk factor of cardiovascular events among patients with abnormal thyroid function.[9] Studies have shown a positive association of extracellular thyroid stimulating hormone (TSH) with lipid levels in hypothyroid subjects. In a prominent study referred to as the HUNT study, the association of hypothyroidism with high blood lipids was observed as a linear function across the entire reference range of TSH.[10] Tagami et al. determined an association between serum TSH and lipid levels.[11] A pronounced atherosclerotic lesion has been demonstrated in children and adolescents with hypothyroidism, with an accompanying elevation in total cholesterol (TC) and LDL levels and decreased high-density lipoprotein (HDL) level.[12]

Endothelial Dysfunction—An Important Point for Consideration

Whickham's study showed no association between elevated TSH and dyslipidemia.[13] A study by Tamer et al. also showed no discernible correlation of TSH levels with serum lipids. However, an interesting point had emerged, viz., anti-thyroperoxidase antibodies (TPOAb) have correlated positively and pronouncedly with serum triglyceride (TG).[14] Increased carotid intima-media thickness in HT women, independent of thyroid function has also been reported.[15] Subclinical hypothyroid patients are more prone to

[1,4]Department of Biochemistry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

[2,3]Department of Biochemistry, Mahatma Gandhi Medical College and Research Institute, Puducherry, India

[5]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

[6]Department of Biochemistry, All India Institute of Medical Sciences, Jodhpur, India

Corresponding Author: Sumathi Saravanakumar, Department of Biochemistry, Mahatma Gandhi Medical College and Research Institute, Puducherry, India, e-mail: sumathi.bio21@gmail.com

How to cite this article: Ranganadane R, Sumathi S, Raghavan SA, Shafiulla A, Subramanian G, Nachimuthu MKS. Cardiovascular Risk in Hashimoto's Thyroiditis: Role of Thyroid Autoimmunity. J Basic Clin Appl Health Sci 2021;4(1):20–22.

Source of support: Nil

Conflict of interest: None

International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Shankarappa VK et al. Int J Reprod Contracept Obstet Gynecol. 2021 Jan;10(1):127-131
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20205413

Original Research Article

Comparison of PGE2 gel alone versus sequential use of Foley's catheter and PGE2 gel in the ripening of unfavorable cervix: a retrospective study

Veena Kadadanamari Shankarappa*, Preethi Natarajan, Monisha Natarajan

Department of Obstetrics and Gynecology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Received: 15 November 2020
Accepted: 01 December 2020

***Correspondence:**
Dr. Veena Kadadanamari Shankarappa,
E-mail: ssykid2003@yahoo.co.uk

ABSTRACT

Background: Induction of labor is common procedure practiced in obstetrics. Various methods used for cervical ripening are lacking the proven superiority of one over other. Our study aimed at comparing intracervical PGE2 gel used alone with sequential use of Foley's catheter and PGE2 gel in order to appreciate reduction in LSCS rate without affecting neonatal outcome.

Methods: The retrospective study was conducted among cases delivered with labor induction between June 2017 to January 2019. Among 104 pregnant women, group1 had received PGE2 gel alone and group 2 had received Foley's followed by PGE2 gel for induction. The primary outcome included Cesarean section rate and secondary outcomes included improvement in Bishop scores, induction to delivery interval, indication for LSCS, APGAR scores, NICU admission. Data was analyzed and compared.

Results: Both groups were comparable with respect to maternal age, gestational age and indication for induction. There was no significant difference in the mean pre-induction Bishop score between groups. Mean IDI was higher in group 2. There was no difference in mode of delivery, neonatal and maternal morbidity between groups. Higher number of women went into spontaneous labor among group 2 and higher number of women needed oxytocin among group 1 for augmentation.

Conclusions: Intra cervical PGE2 can be safely used among women with unfavorable cervix to achieve faster delivery without increasing LSCS rate. Whereas sequential use of Foley's catheter and PGE2 gel can be safer alternative for induction of delivery with low risk of oxytocin augmentation when quicker delivery is not needed.

Keywords: PGE2 gel, LSCS, Foley's catheter, Induction of labor

INTRODUCTION

Induction of labor is indicated when continuation of pregnancy is not beneficial to fetus and may harm the fetus or mother. Status of the cervix determines the success of induction. Several methods are used to ripen the cervix prior to initiation of contractions. Soft, anterior and effaced cervix dilates better compared to firm cervix. Mechanical methods such as Foleys catheter and double balloon stretch the cervix by the pressure on internal os and cervical canal, whereas prostaglandins mimic physiological cervical ripening and prepare the myometrium for uterine contraction. Unlike prostaglandins, mechanical methods less likely to cause hyper stimulation but increase induction to delivery interval. Although many methods are used to ripen the cervix, superiority of any one method is not proven.

Caesarean section cause substantial risk in index pregnancy as well as future pregnancy. Increased risk of caesarean section is one of the major concerns when compared with the spontaneous labor. Of primigravida

An Interesting Case of Bilateral Upper Limb Wasting: Hirayama Disease

Priscilla Rubavathy Eugin[1] Manokaran Chinnusamy[1] Sathiyanarayanan Janakiraman[1]

[1]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MBBS, MD, Department of General Medicine, 9, Associate Professor Quarters, Sri Manakula Vinayagar Medical College and Hospital Campus, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci NU 2021;11:40–43

Abstract

Hirayama disease is a rare neurologic disease and is characterized by insidious unilateral or bilateral muscular atrophy and weakness of the forearms and hands without sensory or pyramidal signs. Our patient presented with bilateral upper limb wasting, which is a rarer variant of motor neuron disease. The diagnosis of Hirayama disease is based on dynamic magnetic resonance imaging (MRI). This case displays how dynamic cervical spine MRI can pick up dynamic cord compression and contributes to zero in the diagnosis of Hirayama disease.

Keywords
- Hirayama disease
- dynamic MRI
- motor neuron disease

Introduction

Hirayama disease is a rare neurological disease and is characterized by insidious unilateral or bilateral muscular atrophy and weakness of the forearms and hands without sensory or pyramidal signs. The disease primarily affects men in the second or third decades of life. The disease progresses initially, but spontaneous arrest is known to follow several years after the onset.

Case Report

History and Examination

A 20-year-old male presented with complaints of insidious onset symmetric weakness of hands due to lifting heavy objects for 7 months. It progressed to reduced dexterity, with difficulty in mixing food, buttoning of clothes, and combing hair. Furthermore, he noted wasting of muscles and clawing of fingers for last the 4 months (→ Fig. 1). There was no history suggestive of involvement of higher mental function, cranial nerves, lower limbs, bowel and bladder, or sensory system. There were also no other known comorbidities.

On examination, the patient had weakness involving both hands, with a handgrip of 60% and impaired abduction and adduction of the digits and opposition of the thumb, with wasting and fasciculation. All other reflexes were normal. Powers of arm and forearm muscles were normal. Sensations were intact. There was no evidence of involvement of the pyramidal, spinothalamic, posterior column lesions, polyminimyoclonus, or autonomic disturbances. The patient was provisionally diagnosed with bilateral upper limb distal wasting under evaluation, and work-up for cervical spine pathology, predominant motor neuropathy, and distal myopathy was considered along with possibility of motor neuron disease (MND) variant.

Investigation

- Blood investigations such as complete blood count, sedimentation rate, and renal, liver, and thyroid function tests were within normal limits, including creatine phosphokinase levels.
- Magnetic resonance imaging (MRI) cervical spine: loss of cervical lordosis. In the neutral position, there is asymmetrical focal cervical cord flattening noted from C5–C7. On flexion MRI, there is anterior displacement of the cervical cord, with cord and spinal canal compression noted from C5 to C7 level (→ Fig. 2). Anterior shift of the posterior dura with T2-weighted image (T2WI) and short tau inversion recovery (STIR) (→ Fig. 3) hyperintense collection is noted in the epidural space for an approximate length of 12 cm with a maximum thickness of 8 mm with few curvilinear large T2WI flow voids noted within, representing epidural venous engorgement (→ Fig. 4).

published online
October 16, 2020

DOI https://doi.org/10.1055/s-0040-1718237
ISSN 2582-4287.

Thieme Medical and Scientific Publishers Pvt. Ltd. A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

e published online: 2020-12-30

A Rare Case of Myocardial Infarction with Nonobstructive Coronary Arteries Due to Hereditary Thrombophilia

Ramesh Bala Arivazhagan[1] Manokaran Chinnusamy[1] Ashida Thulaseedharan Sarojadevi[2] Sathiyanarayanan Janakiraman[1]

[1]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Pondicherry, India
[2]Department of Cardiology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MBBS, MD, Department of General Medicine, 9, Associate Professor Quarters, Sri Manakula Vinayagar Medical College and Hospital Campus, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci NU 2021;11:101–103

Abstract

The incidence of acute myocardial infarction with nonobstructive coronary arteries in young age less than 20 years in India due to hereditary thrombophilia is uncommon. Combined protein S and protein C deficiency has an increased tendency for coronary artery thrombosis in very young individuals. Acute myocardial infarction in young individuals has different risk factors profile, clinical presentation, and prognosis when compared with elderly population and hence incites the need for different approach in the management. Here we report a case of 17-year-old boy who presented with acute inferior wall myocardial infarction with nonobstructive coronary arteries due to hereditary protein C and protein S deficiency.

Keywords
- MINOCA
- thrombophilia
- protein C and protein S deficiency
- anticoagulants
- recurrence of events

Introduction

Coronary artery diseases are considered to be one of the leading causes of mortality and disability in adults worldwide. Acute myocardial infarction in very young patients less than 35 years of age is estimated to be less than 2%. In India there is a rise in the number of young patients with myocardial infarction, where majority of people lack the conventional risk factors.[1]

Young adults with no evidence of atherosclerosis and no major risk factors should be evaluated for deficiency of major anticoagulant proteins especially protein C and protein S. The patients with myocardial infarction should be started on lifelong systemic anticoagulants to prevent the recurrence of events.

Case Report

A previously healthy 17-year-old boy presented to the emergency department with complaints of recurrent vomiting and epigastric pain associated with palpitation and giddiness for 1 hour. He was conscious, oriented with normal Glasgow Coma Scale. His blood pressure was 100/60 mm Hg, heart rate of 88 per minute, saturation was 100% at room air. His cardiovascular clinical examination was found to be normal.

A standard 12 lead electrocardiogram (ECG) showed ST segment elevation of more than 2 mm in lead II, III, aVF suggestive of inferior wall myocardial infarction (►Fig. 1) with no extension in right ventricular and posterior wall which was confirmed by taking right-sided and posterior ECG. Basic investigations were found to be normal. The two-dimensional (2D) echocardiogram showed an adequate LV function with mild hypokinesia of inferior wall. He was immediately thrombolyzed with injection Tenecteplase (recombinant tissue plasminogen activator), after thrombolysis he symptomatically improved with resolution of ST segment elevation indicating successful thrombolysis. CK-MB (creatine kinase myocardial band) was elevated, and troponin I was found to be positive.

published online
December 30, 2020

DOI https://doi.org/10.1055/s-0040-1722427
ISSN 2582-4287.

Thieme Medical and Scientific Publishers Pvt. Ltd. A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

Kathar hussain and N Egyptian Journal of Radiology and Nuclear Medicine (2020) 51:226
https://doi.org/10.1186/s43055-020-00346-4

Egyptian Journal of Radiology and Nuclear Medicine

CASE REPORT Open Access

A case report of Amyand hernia—radiological diagnosis and literature review

Mohamed rafi Kathar hussain[1*] and Kulaseleran N[2]

Abstract

Background: The hernia is defined as the protrusion of any organ or a part of it through the wall or fascia or any connective tissue which normally encloses that organ. Among the hernias, an inguinal hernia is the most common type. In the inguinal hernia, Amyand hernia is one of the rare types, in which the appendix will herniate through the inguinal canal. The incidence of Amyand hernia is less than 1% (Namdev et al., Int Surg J 7:2072, 2020).

Case presentation: We are reporting a case of Amyand hernia, which was diagnosed incidentally in the patient who had been referred to computerized tomography (CT) for a malignant melanoma metastasis screening. Our case is unique in that pre-operative diagnosis of the Amyand hernia is rarely reported in the literature. We can diagnose the type 1 Amyand hernia with utmost confidence.

Conclusion: Pre-operative diagnosis of type 1 Amyand hernia can be made with utmost certainty by CT.

Keywords: Amyand, Computerized tomography, Appendix, Inguinal, Ultrasonogram, Surgery, Imaging

Background

The hernia is defined as the protrusion of any organ or a part of it through the wall or fascia or any connective tissue which normally encloses that organ. Hernias can occur due to various factors. The most common etiology is due to the weakness of the muscular layer or any persistent congenital or acquired defect in the wall. It can be reducible, in which the sac contents go back from the sac into the cavity. Or it can be irreducible or incarcerated hernia when the sac content does not go back. The most common cause of irreducibility is due to the development of adhesion. An incarcerated hernial loop can go for strangulation at any time, in which blood supply to the loop is lost leading to the development of gangrene.

Among the hernias, an inguinal hernia is the most common type. In the inguinal hernia, Amyand hernia is one of the rare types with an incidence of less than 1% [1]. Amyand hernia is defined as the presence of an appendix within the hernial sac, with or without appendicitis.

Surgical management changes, when the surgeon finds the presence of an inflamed appendix within the hernial sac. Therefore, both surgeons and radiologists are concerned about the contents of the hernia sac. Pre-operative diagnosis of Amyand hernia can be made with CT, through which imaging will play an important role in surgical management.

Case presentation

A 75-years-old male patient, who was a known case of malignant melanoma of the right foot, had come with the complaints of recent onset of right groin swelling. He had no other presenting complaints. His vital parameters were stable. Examinations of the respiratory, cardiovascular system, and central nervous system are within normal limits. The abdomen was soft with no organomegaly. Local examination of the right femoral region showed right femoral lymphadenopathy. Clinical diagnosis of right femoral lymph nodal metastasis was

*Correspondence: radiologistrafi1984@gmail.com
[1]Assistant Professor, Department of Radio-diagnosis, Sri Manakula Vinayaga Medical College, Kalitheerthalkuppam, Puducherry, India
Full list of author information is available at the end of the article

Kathar Hussain Egypt J Radiol Nucl Med (2022) 53:37
https://doi.org/10.1186/s43055-022-00712-4

Egyptian Journal of Radiology and Nuclear Medicine

CASE REPORT Open Access

A case report of vanishing testicle: radiological diagnosis and short review

Mohamed Rafi Kathar Hussain*

Abstract

Background: Vanishing testicular syndrome is also known as testicular regression syndrome (TRS) is due to atrophy and disappearance of testis in the fetal life after the formation of the normal testis. It is a spectrum of disorders; clinical features are depending upon the stage of fetal or early neonatal life at which function of testicles ceases.

Case presentation: Young 40-year-old male patient came for a routine master health checkup. On clinical examination he had a nonpalpable left testis, Rest of the clinical examinations are unremarkable. Referred to ultrasound (USG), for testis localization reveals the absence of left testis in the left scrotal sac and inguinal canal. Further MRI of the scrotum reveals the feature of TRS.

Conclusion: TRS in the 4th-decade adult is rarely reported in the literature. The asymptomatic presentation shows the least possibility of neoplasm in TRS patients.

Keywords: Vanishing testis, USG, Cryptorchidism, Testicular regression syndrome

Background

Vanishing testicular syndrome is also known as testicular regression syndrome (TRS) is due to atrophy and disappearance of unilateral testis in the fetal life after the formation of the normal testis. It is a spectrum of disorders; clinical features are depending upon the stage of fetal or early neonatal life at which function of testicles ceases.

Case presentation

Young 40-year-old male patient came to the hospital for a routine master health checkup. No significant past surgical or medical history. He is married 10 years before and had two children. His vital parameters were stable. Examinations of the respiratory, cardiovascular system, central nervous system are within normal limits. The abdomen was soft with no organomegaly. Local examination of the scrotum shows nonpalpable left testis. The right testis appears normal. The patient was referred to USG. USG shows normal right testis with normal echoes and vascularity (Fig. 1). The left scrotal sac is empty. The left testis is not visualized in the left scrotal sac and the left inguinal canal. The patient was further subjected to MRI to find the left testis. MRI shows a normal appearance of the right testis. Left spermatic cord structures are noted within the left inguinal canal. A small soft tissue nodule was noted in the tip of the left spermatic cord (Figs. 2, 3, 4, 5).

Left testis is not separately visualized in the left scrotum, inguinal canal, or pelvis. Features are suggestive of left TRS. The patient is not willing for surgical exploration and was advised to have a follow-up.

Discussion

Vanishing testicular syndrome is also known as testicular regression syndrome (TRS) is due to atrophy and disappearance of unilateral testis in the fetal life

*Correspondence: radiologistrafi1994@gmail.com
Department of Radio Diagnosis, Sri Manakula Vinayagar Medical College, Kalitheerthalkuppam, Puducherry, India

J Spine Res Surg 2020; 2 (2): 067-076 DOI: 10.26502/jfsrs0017

Research Article

Study on the Role of Non Penetrating Titanium Clips in Dural Repair

Naveenkumar kuppan[1*], Krishnakumar R[2]

[1]Department of Orthopaedics & Spine surgery, Sree Manakula Vinayagar Medical College & Research Centre, Puducherry, India

[2]Department of Spine surgery, Consultant, Medical Trust Hospital, Kochi, India

*Corresponding Author: Naveenkumar kuppan, Department of Orthopaedics & Spine surgery, Sree Manakula Vinayagar Medical College & Research Centre, Puducherry, India, E-mail: dgcnnaven@gmail.com

Received: 14 May 2020; Accepted: 26 May 2020; Published: 01 June 2020

Citation: Naveenkumar kuppan, Dr. Krishnakumar R. Study on the Role of Non Penetrating Titanium Clips in Dural Repair. Journal of Spine Research and Surgery 2 (2020): 067-076.

Abstract

Study design: A Prospective study.

Objective: Dural injuries (Durotomy) are a common complication often seen in spine surgeries. Primary repair of dura using conventional techniques with sutures (silk or prolene) is considered gold standard in management.

Overview of Literature: The use of Non-penetrating Titanium clips as an alternate for the sutures in Dural closure has been described in literatures. The surgical use of titanium clips alone for the primary repair of dura in spine surgeries is yet to be substantiated. Aim of this study is to assess the role of non-penetrating Titanium clips in Dural repair surgeries.

Methods: This is a study conducted from November 2017 to July 2019 involving a total of hundred forty one spine patients. Thirty seven patients who had undergone spinal epidural steroid injections and scoliosis surgeries were excluded from the study. Of the hundred and four cases, fifteen cases had undergone Dural repair. Non-penetrating Titanium clips were applied in five of the cases.

Results: Among the five cases, three were female and two male patients. Three cases undergone spinal decompression and fusion, one case of microdiscectomy

Received: 8 July 2020 | Accepted: 18 July 2020
DOI: 10.1002/jso.26140

RESEARCH ARTICLE

WILEY

Impact of the initial phase of COVID-19 pandemic on surgical oncology services at a tertiary care center in Eastern India

Mahesh Sultania MCh | Dillip K. Muduly MCh | Vigneshwaran Balasubiramaniyan MS | Mohammed Imaduddin MS | Ephraim R. DNB | Itisha Chaudhary DNB | Abhitesh Singh MS | Anshul Jain MS | Lalchhandami Colney MS | Sachin Ambre MS | Dipin K. R. MS | Madhabananda Kar MS

Department of Surgical Oncology, All India Institute of Medical Sciences, Bhubaneswar, India

Correspondence
Madhabananda Kar, MS, Department of Surgical Oncology, AIIMS, Sijua, Patrapada, Bhubaneswar, Odisha, 751019 India.
Email: surgonm@aiimsbhubaneswar.edu.in

Abstract

Background: The COVID-19 pandemic has caused a global health emergency and affected the resources in both the public and private health sectors significantly. The present study aims to assess the impact of the pandemic on the services by the department in the first 3 months since the first COVID case in the region.

Methods: The study period was from 16 March to 15 June 2020. We queried the database for data on site of the tumor, diagnosis, stage, tumor board decisions and planning, surgical procedures, adjuvant treatment, and follow-up details. The change in tumor board decision and actual treatment taken by the patient were all recorded, taking into consideration the COVID-19 pandemic.

Results: Among the 1567 patient contacts, 1306 were out-patient visits and 261 teleconsultations. Fifty-four patients underwent surgery from the 87 admitted to the hospital. Ten preoperative patients and two postoperative patients were tested for COVID and reported to be negative.

Conclusions: The dilemma of providing cancer surgery services to the patients in this pandemic has been global. Strict measures and guidelines can help to overcome the COVID pandemic time, keeping in mind the locoregional logistics.

KEYWORDS
COVID-19, surgical oncology, teleconsultations

1 | INTRODUCTION

The COVID-19 pandemic has caused a global health emergency and affected the resources in both the public and private health sectors significantly. India reported its first case on 30 January 2020.[1] On 11 March 2020, the World Health Organization (WHO) had declared it as a global pandemic and as a public health emergency of international concern.[2] Our institute—All India Institute of Medical Sciences (AIIMS), Bhubaneswar, is situated in the Khordha district of Odisha state in Eastern India. The state reported its first case on 16 March 2020.[3] The Government of India on 24 March 2020 announced a nationwide 21-day lockdown period from 25th March as a preventive measure.[4] The lockdown was further extended in different phases. The fear, as well as attempt for preparedness of pandemic, brought changes in the modus operandi in our institute. The present study aims to assess the impact of the pandemic on the services by the department in the first 3 months since the first COVID case in the region. The secondary objective is to report the population catered, handling of the out-patient department (OPD), clinics and teleconsultations, types and stages of cancer, surgical procedures, and COVID-19-related events.

Case Report

A Rare Case of Recurrent Massive Petrous Bone Cholesteatoma: Subtotal Petrosectomy without Blind Sac Closure

Santhanakrishnan Kalaivarsdan, Poornima Shankar Bhat, Nisha Murugandhi, Sethu Palanisppam
Department of ENT, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Petrous bone cholesteatoma is a rare challenging disease that accounts for 4%–9% of all petrous bone lesions. Subtotal petrosectomy with mastoid obliteration without blind sac closure is presented here. A 25-year-old female patient presented with right ear discharge for 5 days, with a history of right ear surgery 19 years back. Right ear external auditory canal showed stenosis suggestive of blind sac closure in the past. High resolution computer tomography and magnetic resonance imaging of temporal bones were suggestive of massive cholesteatoma in right petrous bone with extension into the posterior cranial fossa. As the patient refused blind sac closure, the patient underwent right subtotal petrosectomy, with mastoid obliteration, with wide meatoplasty. The patient is on regular follow-up without any complications. Although blind sac closure is routinely done, mastoid obliteration with wide meatoplasty is an alternative method without increased incidence of complications. Early patient reporting and clinical suspicion of recurrence and prompt treatment is facilitated by wide meatoplasty.

Keywords: Cholesteatoma, meatoplasty, subtotal petrosectomy

Introduction

Petrous bone cholesteatoma is a rare disease that accounts for 4%–9% of all petrous lesions which can be congenital or acquired cholesteatoma.[1] There are many types of petrous apex lesions such as cholesterol granuloma, mucocoele, arachnoid cyst, acoustic neuroma, epidermoid cyst. Incidence rate of congenital cholesteatoma is 2%–5% with a male predominance of 3:1.[2] Petrous bone cholesteatoma is classified according to Samna's classification.[3] Subtotal petrosectomy was described by Fisch as the complete exenteration of all pneumatic tracts in the temporal bone.[4] Subtotal petrosectomy was performed in this case with mastoid obliteration without blind sac closure.

Case Report

A 25-year-old female patient presented to ear, nose, and throat (ENT) outpatient department of a tertiary care hospital with complaints of scanty, foul-smelling discharge from right ear for 5 days associated with throbbing type of pain in the right ear. She gave a history of mild hearing loss in the right year since childhood. She gave a history of right ear surgery done at the age of 6 years elsewhere. Ear was free of discharge or pain since then. Complete ENT examination revealed purulent discharge in the right external auditory canal suggestive of previous blind sac closure. Tuning fork tests and Pure Tone Audiometry were suggestive of moderate conductive hearing loss in the right ear. Facial nerve and vestibular function tests were normal. The rest of the ear, nose, and throat examination was normal.

High-resolution computed tomography was suggestive of soft tissue lesion in the right mastoid cavity with erosion of tegmen tympani Suggestive of cholesteatoma [Figure 1]. Magnetic resonance imaging brain (plain) was suggestive of a

Address for correspondence: Dr. Poornima Shankar Bhat, Department of ENT, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry - 605 107, India.
E-mail: poornimabhat86@gmail.com

Submitted: 24-Jun-2020 **Revised:** 24-Jun-2020 **Accepted:** 19-Jul-2020
Published: 22-Dec-2020

Access this article online
Quick Response Code:
Website: www.indianjotol.org
DOI: 10.4103/indianjotol.INDIANJOTOL_138_20

How to cite this article: Kalaivarsdan S, Bhat PS, Murugandhi N, Palanisppam S. A rare case of recurrent massive petrous bone cholesteatoma: Subtotal petrosectomy without blind sac closure. Indian J Otol 2020;26:194-6.

Study on the Outcomes of Desarda Repair in Inguinal Hernia Surgery

Srinath Sarma S.V.[1], Rajavel M.[2], Balakrishnan V.[3]

[1]Junior Resident, Department of General Surgery, Sri Manakula Vinayagar Medical College and Hospital, Puducherry. [2]Assistant Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College and Hospital, Puducherry. [3]Professor, Department of General Surgery, Sri Manakula Vinayagar Medical College and Hospital, Puducherry.

ABSTRACT

BACKGROUND

Inguinal hernias are one of the commonest problems encountered by the treating physicians. Even though the learning curve for Lichtenstein hernioplasty is less, there is usage of a foreign body which may produce mesh reactions leading to various other surgical complications. Also the cost of the mesh is a little higher which may not be affordable for people belonging to low or very low socio-economic class especially in developing countries like India. Desarda's repair is a tissue based technique of hernia repair using an undetached strip of external oblique aponeurosis to strengthen the posterior wall of the inguinal canal.

METHODS

This is a hospital based cross sectional study. All patients admitted to the hospital with the diagnosis of inguinal hernia and fulfilling the inclusion criteria were counselled about the study. After obtaining informed written consent, all the study participants were subjected to a standard questionnaire both pre operatively and post operatively. Patients were followed up for a period of 6 months for assessing chronic postoperative pain, to record the post-op day on which they resumed their regular activity and the recurrence rate. Those participants who were unable to attend the review were contacted through the phone and questionnaire was completed.

RESULTS

A total of 165 patients was studied between Oct 2017 and May 2019. Mean operating time was found to be 44.63 ± 7.76 mins; the cost for surgery in 99.4% was between Rs. 1000-2000; 2.4% patients had developed seroma and only 1 person developed haematoma; none of the subjects had infection or recurrence; 77.6% had a pain score of 4 on POD 1, 96.4% had a pain score 2 on POD 2; mean duration of hospital stay was 4.9 ± 0.99 days; mean duration of resuming duty was 18.58 ± 3.43 days.

CONCLUSIONS

Desarda's technique is cost effective and therefore can be done in patients of all socio-economic classes. Our results in this study after Desarda repair are good and similar to the results of Liechtenstein or Shouldice techniques. Hence, Desarda method seems to be an attractive alternative. It is safe, fast, simple and easy to learn and perform with minimal complications or recurrence.

KEYWORDS

Inguinal Hernia, Hernioplasty, Desarda Repair, Cost Effective

Corresponding Author:
Dr. Rajavel M,
#24, Nethaji Road,
Manjakuppam,
Cuddalore- 607001.
E-mail: rajavelmathi@rocketmail.com
DOI: 10.18410/jebmh/2020/75

Financial or Other Competing Interests: None.

How to Cite This Article:
Srinath Sarma SV, Rajavel M, Balakrishnan V. Study on the outcomes of desarda repair in inguinal hernia surgery. J. Evid. Based Med. Healthc. 2020; 7(7), 351-354. DOI: 10.18410/jebmh/2020/75

Submission 23-01-2020,
Peer Review 27-01-2020,
Acceptance 13-02-2020,
Published 17-02-2020.

Cureus

Open Access Original Article

DOI: 10.7759/cureus.6943

Comparison of Different Scoring Systems in Predicting the Severity of Acute Pancreatitis: A Prospective Observational Study

N. R. Venkatesh [1], Chellappa Vijayakumar [1], Gopal Balasubramaniyan [1], Sakthivel Chinnakkulam Kandhasamy [1], Sudharsanan Sundaramurthi [1], Sreenath G. S. [1], Krishnamachari Srinivasan [1]

1. Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, IND

Corresponding author: Gopal Balasubramaniyan, drbala18@gmail.com

Abstract

Background

Acute pancreatitis (AP) is an inflammatory condition of the pancreas mostly due to alcohol or gallstones. Various scoring systems were involved in identifying the severity of the disease. The standard single score to identifying the severity remains uncertain.

Methodology

This prospective observational study was carried out for two years in a tertiary care center from South India. The diagnosis of AP was made based on Atlanta criteria, and a total of 164 patients were included. All patients were assessed by acute physiology and chronic health evaluation II (APACHE II), bedside index for severity in AP (BISAP), modified Glasgow score (MGS), and Ranson score on admission and 48 hours after admission scores. Procalcitonin was done in all patients with AP. Contrast-enhanced computed tomography (CT) of the abdomen was done in 69 patients who had features of severe acute pancreatitis (SAP). Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and diagnostic accuracy were calculated for each score, and procalcitonin for CT documented severe patients and organ failure patients together.

Results

A total of 164 patients were included in this study. CT abdomen showed a modified CT severity index (MCSI) >8 in all 69 (100%) patients. APACHE II score could predict SAP based on CT findings in 44 patients (63.76%), BISAP score in 22 patients (31.88%), MGS in 55 patients (79.71%), Ranson score at admission in 31 patients (44.92%), Ranson score 48 hours after admission in 44 patients (63.76%), and procalcitonin on admission in 69 patients (100%) when cut-off used as per the literature. APACHE II score could predict SAP in cases of AP (n=164) in 52 patients (50%), BISAP score in 27 patients (26%), MGS in 79 patients (76%), Ranson score at admission in 34 patients (33%), and Ranson score 48 hours after admission in 61 (59%) patients when cut-off was used as per the literature. This study demonstrated that Ranson score on admission had a good area under the curve (AUC). AUC (0.8483), APACHE II (AUC 0.7708), and Ranson score 48 hours after admission (AUC 0.8167) had a fair accuracy. BISAP (AUC 0.6399) and MGS (AUC 0.6486) had poor accuracy for the prediction of severity in AP based on receiver operator characteristic (ROC) curves.

Received 02/04/2020
Review began 02/07/2020
Review ended 02/07/2020
Published 02/10/2020

How to cite this article
Venkatesh N, Vijayakumar C, Balasubramaniyan G, et al. (February 10, 2020) Comparison of Different Scoring Systems in Predicting the Severity of Acute Pancreatitis: A Prospective Observational Study. Cureus 12(2): e6943. DOI 10.7759/cureus.6943

International Surgery Journal
Karnawat AV et al. Int Surg J. 2020 Jun; 7(6): 1830-1835
http://www.ijsurgery.com

pISSN 2349-3305 | eISSN 2349-2902

DOI: http://dx.doi.org/10.18203/2349-2902.isj20202391

Original Research Article

Systemic inflammatory response syndrome as a predictor of poorer outcomes in diabetic foot infection: a prospective analytical study

Anand Vinay Karnawat[1], Vijayakumar Chellappa[1], Balasubramanian Gopal[1]*, Rajkumar Nagarajan[1], Krishnamachari Srinivasan[2]

[1]Department of Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry, India
[2]Department of Surgery, Sri Manakula Vinayagar Medical College and Hospital, Puducherry India

Received: 01 March 2020
Revised: 10 April 2020
Accepted: 30 April 2020

***Correspondence:**
Dr. Balasubramanian Gopal,
E-mail: drbala18@gmail.com

ABSTRACT

Background: This study was done to diagnose the severity of infection in a group of hospitalized diabetic foot infection (DFI) patients based on the presence or absence of systemic inflammatory response syndrome (SIRS) and compare the outcomes.
Methods: This was a single-center cohort study, in which 50 consecutive DFI patients having SIRS and 50 consecutive patients not having SIRS were included. Patients were followed for the duration of the hospital stay; parameters for glycaemic control, minor and major amputation, microbial culture, duration of hospital and ICU stay and mortality was recorded.
Results: The relative risk of major amputation among the patients of DFI who presented with SIRS was 2.66 times higher compared to who was not having SIRS at presentation (95% CI, 1.56-4.55). The presence of polymicrobial infection also had a statistically significant association with the incidence of major amputation. The duration of hospital stay was ~9.5 days longer in the DFI patients who presented with SIRS compared to who was not having SIRS at the time of presentation [8.00 (4.00-20.50) days versus 17.50 (10.75-38.25) days]. DFI patients with SIRS required a significantly prolonged ICU.
Conclusions: SIRS can be used as objective criteria to predict poorer outcomes in the diabetic foot infection patient and also to classify it.

Keywords: DFI, Morbidity, Sepsis, SIRS, Quality of life

INTRODUCTION

Diabetes mellitus has been a global epidemic of 21st century. In 2015, International Diabetes Federation (IDF) published its seventh atlas, which estimated that 415 million people among the adults of age group 20-79 years worldwide are suffering from diabetes mellitus. Which amounts to 8.8% of adults aged between 20-79 years of age. One in eleven adults is suffering from diabetes mellitus. Taking ongoing trends into consideration IDF predicted by 2040, 642 million people worldwide will be diabetic. India is house for 69.2 million diabetics. It ranks second in the absolute number of diabetics following China at first place. [1]

Most dreaded complication of diabetes mellitus is lower extremity amputations. Patients who are undergoing lower extremity amputation will require ipsilateral or contralateral amputation within next three to five years. Five-year mortality related to diabetic foot ulcer is very high. According to Moulik et al, five-year mortality rate for patients with diabetic foot ulcer is 45%, 18% and 55%

Original Article

Prevalence of Psychiatric Morbidities among Children of Alcohol-Dependent Patients – A Hospital-Based Cross-Sectional Study

Harsh Avinash Thappa, Arun Selvaraj, Vinoth Krishna Dass
Department of Psychiatry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Background: Children of alcoholics (COAs), particularly experience life uniquely in the families of alcoholic parents. They are more likely than others to suffer from various physical, emotional, and mental health problems. **Aims:** The aim of this study is to estimate the prevalence of psychiatric morbidity among the children of alcohol-dependent patients attending our tertiary health care center, and further determine the association between clinical-sociodemographic background and psychiatric morbidities among these children. **Methods:** It was a cross-sectional study consisting of 100 COAs. Data collections tools used were: Pro forma for sociodemographic details, the Kiddie – Schedule for Affective Disorders and Schizophrenia for school-aged children (6–18 years) Present and Lifetime version (K-SADS PL), Learning Disability Checklist and Wechsler's Intelligence Scale for Children. The data were entered using statistical software Epi-Info (version 3.7.2.1) software package, analyzed using the SPSS software version 24.0. **Results:** About 60% of COAs assessed had the presence of psychiatric morbidity, with anxiety spectrum and depressive disorders being the most commonly associated diagnosis. It was noted that female gender had a positive association with anxiety spectrum disorders. Further, a history of child abuse had a positive association with evidence of psychiatric morbidity in these children. In addition, family history of antisocial personality traits had a significant association with conduct disorder in COAs. **Conclusions:** To conclude, psychiatric morbidities were identified in about 60% of children whose fathers were alcohol dependent. These COA's commonly manifested with two major psychiatric morbidities, namely anxiety and depression. Nearly 1/10th of these children were noted to have substance use as well.

Keywords: Child abuse, children of alcoholics, conduct disorder, psychiatric morbidity

Introduction

Alcoholism is a global health issue. The WHO estimations reveal around 208 million people with affected around the world, about 4.1% of the population above 15 years of age.[1] Alcoholism affects not only the individual, but the functioning of his whole family and the environment around him. Living with an alcoholic can be constantly stressful, affecting each individual distinctively. Children of alcoholics (COAs), particularly experience life uniquely in such families. Hence, COA may be unable to nurture in developmentally healthy ways. COAs are more likely than others to suffer from various physical, emotional, and mental health problems. Furthermore, they are likely to have problems in school and may land up in alcohol abuse and use of other substances as well. Life in an alcoholic family is typically characterized by guilt, fear, pain, stress, and insecurities. However, these children seldom seek help from others, even in adulthood, thus enabling alcoholism to become a family secret. Greater effort should thus be taken from the medical and social service systems to recognize this susceptible group and provide early interventions to them.

Growing up in an alcoholic family does not essentially mean that the child will develop problems. There are youngsters who show little or no signs of difficulty and are also successful as adults. Even so, a family history of alcoholism serves

Submitted: 03-Jul-2020 Revised: 04-Aug-2020 Accepted: 25-Aug-2020 Published: 16-Nov-2020

Access this article online

Quick Response Code:

Website: www.aiip.co.in

DOI: 10.4103/aiip.aiip_62_20

Address for correspondence: Dr. Vinoth Krishna Dass, Department of Psychiatry, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet - 605 107, Puducherry, India.
E-mail: vinothkrishnadass@gmail.com

How to cite this article: Thappa HA, Selvaraj A, Dass VK. Prevalence of psychiatric morbidities among children of alcohol-dependent patients – A hospital-based cross-sectional study. Ann Indian Psychiatry 2020;4:190-5.

GLOBAL JOURNAL OF MEDICAL RESEARCH: B
PHARMA, DRUG DISCOVERY, TOXICOLOGY & MEDICINE
Volume 20 Issue 4 Version 1.0 Year 2020
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4618 & Print ISSN: 0975-5888

Association between Quality of Sleep and its Effect on Glycaemic Control in Patients with Type 2 Diabetes Mellitus- A Pilot Study

By Dr. Firas Rauf Mammoo & Prof. Dr. S. Girija

Introduction- Diabetes mellitus is a common metabolic disease. Nowadays, sleep complaints are increasing day by day due to the restriction in bed time resulting in chronic partial sleep loss.[1] Type 2 diabetes mellitus accounts for 95% of all of diagnosed diabetes worldwide. Several studies have recognized sleep disorder as a novel risk factor for diabetes.[2] Sleep disorder plays a vital role in the development of diabetes via various metabolic and neuroendocrine pathways.[3] Nocturia and neuropathic pain were explained as two possible causes of decreased sleep quality.[1] People who have sleep disorder either in the quality or quantity experienced reduced insulin sensitivity, which results in elevated blood glucose that can aggravate the progress of diabetes. There are limited studies from India on the association of sleep quality and diabetes control status. In this study, we aimed to find the quality of sleep in patients with type 2 diabetes mellitus and its correlation with glycaemic control.

GJMR-B Classification: NLMC Code: WK 610

Strictly as per the compliance and regulations of:

Original Article

Predictors of impending cardiac arrhythmias by electrocardiographic markers in proven obstructive sleep apnea patients

ABSTRACT

Background: Obstructive sleep apnoea is proved to be one of the causes of sudden cardiac death due to undocumented transient cardiac arrhythmias. So we studied the changes in various electrocardiographic parameters (*P* wave duration, QRS duration and Tpeak to Tend interval) and its association with increasing severity of OSA by AHI to predict the risk of impending cardiac atrial and ventricular arrhythmias in these patients.

Objective: This study compares the risk of impending cardiac arrhythmias by electrocardiographic parameters with the increasing severity of obstructive sleep apnoea by AHI (apnoea-hypopnea index) in polysomnnography.

Methodology: The study was conducted in a rural based teaching tertiary care hospital in Puducherry,India. The electrocardiogram(ECG) of the 30 proven OSA patients were analysed for parameters like P wave duration, QRS duration and peak of T wave to end of T wave interval. Any deviation from the normal duration is recorded and compared with the severity of OSA by AHI to estimate the risk of arrhythmogenicity.

Results: Out of 30 OSA patients in the study group 7 (23.3%) were found to have mild OSA [i.e AHI– 5 TO 14 events/hr] , 6 (20%) were found to have moderate OSA [i.e AHI–15 to 29 events/hr] and 17(56.7%) were found to have severe OSA[i.e AHI–30 and above]. The p value is significant [<0.001] for electrocardiographic parameters like Tp-Te interval and *P* wave duration in patients with AHI more than 15 events/hr [i.e moderate and severe OSA] and p value for QRS duration is 0.102.

Conclusion: We concluded that the increase in duration of *P* wave, QRS duration and prolongation of Tp-Te interval in electrocardiogram is associated with increasing severity of obstructive sleep apnoea tends to possess significant risk of developing impending cardiac atrial and ventricular arrhythmias respectively which can be attributed to one of the causes of sudden cardiac death in OSA patients.

Keywords: Apnea hypopnea index, obstructive sleep apnea, P-wave duration, QRS duration, Tp-Te interval

INTRODUCTION

Obstructive sleep apnea (OSA) is the most common type of sleep apnea caused by complete or partial obstruction of the upper airway. It is characterized by repetitive shallow pauses in breathing in spite of efforts to breathe normally. If the symptoms are present in day time also, then it is referred to as OSA syndrome (OSAS). Symptomatic OSAS has been proven to be a risk factor for hypertension, heart failure, and vascular dysfunction and has been proposed to be causally related to both nonfatal and fatal coronary and cerebrovascular events. Preliminary data suggest that there is also a relationship between sleep-disordered breathing, cardiac arrhythmias, and sudden cardiac death.[1]

AK Badrinath, KN Viswanathan, S Suresh Babu, V Yogaraja[1], J Karthik

Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, [1]Department of General Medicine, Mahatma Gandhi Medical College and Hospital, Puducherry, India

Address for correspondence: Dr. J Karthik,
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry - 605 107, India.
E-mail: drkatik16@gmail.com

Access this article online	
Website: www.heartindia.net	Quick Response Code
DOI: 10.4103/heartindia.heartindia_12_20	

How to cite this article: Badrinath AK, Viswanathan KN, Babu SS, Yogaraja V, Karthik J. Predictors of impending cardiac arrhythmias by electrocardiographic markers in proven obstructive sleep apnea patients. Heart India 2020;8:69-73.

Submitted: 19-Mar-2020, Revised: 06-Jun-2020,
Accepted: 18-Jun-2020, Published: 04-Aug-2020.

ublished online: 2021-01-07

Socioeconomic Burden of Type 2 Diabetes with Complications on Families: A Hospital-Based Study in Puducherry

Manokaran Chinnusamy[1] Sathiyanarayanan Janakiraman[1] Roshna Elayidath[1] Ram Arvind[1] Pravin Surendran[2]

[1]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
[2]Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MBBS, MD, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci™

Abstract

Introduction India is on the verge of diabetes mellitus (DM) epidemic. Within the near future, DM will put a big burden on India's already vulnerable and resourced health care system. The objectives of the study were to (1) estimate DM treatment-related out-of-pocket expenditure (OOPE) among type 2 DM patients with complications from a tertiary care hospital and (2) estimate the economic burden on the household income of these patients due to DM treatment-related OOPE.

Methods A hospital-based cross-sectional study was conducted among known type 2 diabetic individuals with complications admitted in a tertiary care hospital. Using a structured pretested questionnaire required data, such as sociodemographic details, direct costs, and indirect costs in health care of DM, which were collected by a personal interview method.

Results Males constituted around 57% of the 100 patients who participated in the study. The average age of the population was 56 ± 10.03 years. The mean monthly income of family (in Indian Rupees [INR]) was 10,375.00 ± 9,201.55. Total expenditure includes the cost of medication, investigation, consultation fee, transportation, and miscellaneous expenditure. The average monthly OOPE in the management of DM for government and private facilities was INR 74 and 1,540, respectively. Among the total cost, the highest share was accrued toward medicines followed by diagnostics, miscellaneous, and transportation. There were 22% of families incurring catastrophic expenditure at the highest threshold of 40%. Socioeconomic status, history of at least one hospitalization in the past 6 months, and type of medications were factors found to be associated with costs.

Conclusion Heavy economic burden highlights the urgent need for the health care agencies and policy bodies to plan and prioritize local health policies and DM management schemes accordingly.

Keywords
- diabetes mellitus
- complications
- healthcare expenditure
- cost of illness

DOI https://doi.org/10.1055/s-0040-1721902
ISSN 2582-4287.

Thieme Medical and Scientific Publishers Pvt. Ltd. A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

JMSCR Vol||08||Issue||11||Page 344-347||November 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i11.58

Journal Of Medical Science And Clinical Research

Recurring Fever in a Cancer Patient – "Light at the end of the Tunnel" – Case Report

Authors

Dr Venugopal Angamuthu Vignesh Kumar[1]*, Dr Subramanian Girija[2], Dr Subbarayan Madhan Kumar[3], Dr Senthilvelan Thenmozhi[4]

[1]Postgraduate, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India

[2]Professor, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India

[3]Assistant Professor, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India

[4]Postgraduate, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India

*Corresponding Author

Dr Subramanian Girija

Abstract

Recurrent fever can be the manifestation of autoimmune disease, malignancies and infections. Working up the cause of fever in a patient with underlying malignancy and under treatment can be a challenging task. We present a case of 46 years old female with breast carcinoma, who presented with recurrent fever episodes. The patient was evaluated and found to have catheter (tunnelled) related septicaemia, septic emboli and endocarditis. Device related infections need high index of suspicion and treatment should be planned based on the type of catheter and organisms.

Keywords: *Right sided infective endocarditis, septic emboli, tunnelled catheter, device related infection.*

Introduction

Recurrent fever can be the manifestation of a wide range of diseases including autoimmune disease, malignancies and infections. A recurrent fever is defined as >12 episodes over a period of 12 months with a minimal interval of seven days between episodes. Such cases are approached by taking a comprehensive history, detailed physical examination and relevant laboratory investigations. Most unexplained fever are often diagnosed within one week of hospital evaluation or 3 outpatient visits. We present a case of breast carcinoma who has completed a course of chemotherapy and under radiotherapy for the past 1 month.

Case Report

A 46 year old female with left breast carcinoma who underwent modified radical mastectomy and on chemotherapy through a chemo-port in right internal jugular vein presented with complaints of intermittent fever with chills and rigors for one and half a month and altered behavior since 2 days and was treated elsewhere with 5 days course of

JMSCR Vol||08||Issue||12||Page 234-236||December 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i12.39

Journal Of Medical Science And Clinical Research

A case report of stroke due to brain stem tuberculoma

Authors
Dr Manomenane.M[1], Dr A.K. Badrinath MD General Medicine[2], Dr S. Suresh Babu MD General Medicine[3]
[1]Post Graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital
[2]Professor and Head of the Department, General Medicine, SMVMCH
[3]Assistant Professor, Department of General Medicine, SMVMCH

Abstract
Tuberculosis still highly prevalent in developing countries commonly affects the lungs. Central nervous system (CNS) involvement in tuberculosis is common in India but tuberculoma a manifestation of tuberculosis which mimics a tumor is not common.[1] most of the CNS tuberculoma presents with seizures or focal signs . here we presents an elderly female with acute CVA with right sided hemiparesis .computed tomography of the brain showed a hyperdense lesion in the left pons. Further contrast enhanced MRI brain revealed left pontine tuberculoma. There are few case reports of tuberculoma presenting as acute stroke.
Keywords: *Stroke, brain stem, tuberculoma.*

Introduction

Tuberculosis a disease caused by acid fast mycobacterium tuberculosis complex bacteria commonly affect the lungs although other organs are involved in about one third of cases .In India with a huge burden of tuberculosis (incidence of 2.2 million cases in 2015) extra pulmonary tuberculosis is a common manifestation.[1] CNS tuberculosis presents as basal meningitis which may complicate by causing obstructive hydrocephalus. Tuberculosis is a rare manifestation of CNS tuberculosis presenting as a space occupying lesion with focal signs or seizures.[3]

Case Report

A 67 years old female patient presented with sudden onset of difficulty in using right upper and lower limb for one day duration .she also had slurring of speech and urinary incontinence. No history of trauma, not a diabetic, hypertensive or coronary artery disease. No history of pulmonary tuberculosis in past or contact history of tuberculosis. On examination patient was conscious and oriented, pallor +, pulse -94 bpm and blood pressure was elevated 160/110mmhg. Cardiac and respiratory auscultation was normal and CNS examination revealed patient conscious and oriented, higher mental functions were intact. Patient had right UMN facial nerve palsy and urinary incontinence. Her power was 2/5 in right upper and lower limb with hypertonia and exaggerated deep tendon reflexes, bilateral plantar extensor. Patient was admitted as a case of acute CVA with right hemiplegia with UMN facial palsy and evaluated.

Original Article

Effect of Interactive Lectures and Formative Assessment on Learning of Epidemiology by Medical Undergraduates – A Mixed-Methods Evaluation

Vinayagamoorthy Venugopal, Amol R. Dongre

Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Background: Previously, we had a course in epidemiology for medical undergraduates that was based on traditional lecture methods with no formal formative assessment (FA). We found poor uptake of our course in terms of learning and attendance by students. **Objective:** The objective was to assess the effect of improved course (interactive lectures and formal FA) in epidemiology on student learning and attendance. **Materials and Methods:** It was a triangulation type of mixed-methods program evaluation, where both quantitative (quasi-experimental design) and qualitative (open-ended responses) analysis was done. This study was carried out in the department of community medicine in a tertiary care teaching hospital, Puducherry. We improved the quality of the course material, interaction in lectures and included formal structured FA in the last course. Kirkpatrick's framework was used for the course evaluation. We compared the performance of three batches to check the effect of our revisions on students' learning and their attendance. **Results:** Student's learning outcome was measured using end-of-course assessment scores (Level-2). The percentage of students successfully completing the course improved from 39% to 81% and attendance status of ≥90% improved from 50% to 57%. Learner's immediate reactions (Level-1) were captured using open-ended questions, and content analysis was done. Students appreciated the course material, FAs, and in-class activity. **Conclusions:** Little improvement in a traditional epidemiology course for undergraduates in the form of interactive lectures and formative feedback and providing the student with course material led to significant gains in students' knowledge and attendance.

Keywords: Epidemiology, feedback, formative assessment, interactive lecture, Kirkpatrick's evaluation

Introduction

Learning epidemiology improves critical thinking and the problem-solving ability of students. However, medical undergraduates pay less attention to this subject, assuming that skills in this subject are not related to practicing medical service in future.[1,2] Though there are various methods of teaching epidemiology, it is predominantly taught by traditional lecture system in India.[3] Lectures make student passive recipients of information, leading to poor engagement of the learning process.[4] These things make teaching epidemiology a real challenge to them.

Considering the large intake of students in medical colleges, lectures still continue to be the primary mode of teaching. Hence, it is important to look at ways in which the traditional lectures can become a more effective environment for engaging students in gaining adequate knowledge and skills. Scientific literatures recommend that lectures can be made effective by modifying it following good teaching–learning principles and assessment format.[5] However, there exists a paucity of evidence, especially at local context, showing the combined effect of interactive teaching and formative assessment (FA) on learning epidemiology by medical undergraduates.

In the department of community medicine (DCM), we have been running a course on epidemiology for medical students

Address for correspondence: Dr. Amol R. Dongre, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry - 605 001, India. E-mail: amoldongre@gmail.com

Access this article online

Quick Response Code:

Website: www.ijcm.org.in

DOI: 10.4103/ijcm.IJCM_46_20

How to cite this article: Venugopal V, Dongre AR. Effect of interactive lectures and formative assessment on learning of epidemiology by medical undergraduates – A mixed-methods evaluation. Indian J Community Med 2020;45:526-30.

Received: 20-01-20, **Accepted:** 03-07-20, **Published:** 28-10-20

VOLUME - 9, ISSUE - 11, November - 2020 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Physiology

ANALYSIS OF HEMATOLOGICAL PARAMETERS IN A POPULATION WORKING IN SMALL TEXTILE INDUSTRY IN SOUTH INDIA.

Dr. Naziruddin Husamuddin* — Assistant Professor, Department of Physiology, Government Vellore Medical College, Vellore, TN, India. *Corresponding Author

Shivayogappa S Teli — Professor and Head, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India Department of Physiology, Govt. Vellore Medical College and Hospital, Vellore.

ABSTRACT

BACKGROUND: In India,With rapid industrialization of the developing world, textile dust induced lung diseases are poised to become a global health problem. The number of industries is on the increase, in India, and several industries like agriculture , textile industries, contribute mainly mankind for comfortable living. Workers are involved in different tasks such as dyeing, spinning, weaving and packing. Weaving in textile units involves working with weaving machines. The workers are exposed to vibration, cotton dust etc.Very less studies are available. **MATERIALS AND METHODS:** A total of 60 males individuals, 30 people involved in weaving sector in textile industry and 30 peoples not involved, age and sex matched, age group 30-40 years,were included in this study. Institutional Ethical approval was obtained.Informed consent obtained. Various parameters including general examination, BMI, total WBC count, Differential count, Absolute eosinophil count, ESR, were obtained. The obtained data was analysed using standard statistical methods. **RESULTS:** The eosinophil counts of weavers (14.96 ±5.56) were found to be higher than non weavers (5.53± 2.37) and it was found to be statistically significant($p<0.05$). The AEC (1241.36 ±498.36,) were found to be higher in weavers than non weavers (540.83± 316.82) and was found to be highly significant($p< 0.05$). The changes in TC(8513.33 ±2415.4,9480±2820.13),DC-N(58± 12.00,71.83± 10.732), L(26.66±9.08,22.7± 10.61), ESR(26.98 ±12.89,24.8±11.11) were found to be insignificant ($p>0.05$). **CONCLUSION:** Among the hematological parameters, eosinophilia is significant finding in weavers. This significant finding will contribute to allergic diseases. The weaving sector textile workers should be emphasized about the use of protective equipments while working.

KEYWORDS : Hematology, Textile Industry, weavers, Eosinophilia.

INTRODUCTION :

In India, With rapid industrialization of the developing world, weaving dust induced lung diseases are poised to become a global health problem. The number of industries is on the increase, in India, and several industries like textile industry, agriculture industry contribute mainly mankind for comfortable living. Workers were involved in different tasks such as dyeing, spinning, weaving and packing. Weaving in textile units involves working with warping and weaving machines. The workers are exposed to vibration, cotton dust and noises. India's major industrial output by textile industry, provides employment to many million people. Comprises of two sectors, highly mechanized mills on one hand and hand weaving & spinning on other hand. Between the two falls the small-scale power loom sector[1].

Aim and Objectives:

1. To measure the hematological parameters like total White Blood Cell count, Differential count, Absolute eosinophil count , Erythrocyte sedimentation rate in a weaving population of textile sector.
2. To measure the changes in hematological parameters.
3. To compare the changes in hematological parameters among weavers with people not exposed to weaving.

BACKGROUND:

Weaving, sector of textile industry, an occupation followed commonly in Southern part of India .Common occupational health hazards in textile industry are respiratory, musculoskeletal, refractory problems [2]. There are numerous reported studies of weavers in developed countries but very few in developing countries[3] But studies on the hematological parameters are very few where this study was undertaken.

MATERIALS AND METHODS :

This is a cross – sectional study ,involving 60 males individuals,30 individuals exposed to weaving and 30 people not exposed to weaving, controls of the same environment, in the age group 30-40 years,age and sex matched ,were included. Institutional Ethical Committee approval was obtained.Informed consent was obtained from the individuals participating in the study. People having any H/O any respiratory problems, Diabetes, Hypertensives ,IHD were excluded from the study. Various parameters including general examination, respiratory system examination ,Height, Weight, BMI, total WBC count, differential count, AEC,ESR, were obtained. Blood samples were collected during daytime around 8AM, under aseptic precautions.The obtained data was analysed using standard statistical methods.

RESULTS:

Baseline characteristics are shown in table 1. The eosinophils and AEC are shown in figure 1.

The eosinophilic counts of weavers(14.96±5.56) was found to be higher than non weavers (5.53±2.37), and the difference was found to be statistically significant ($p<0.05$). The AEC of weavers was found to be higher(1241.36 ±498.36) than non weavers(540.83 ±316.82),and the result was found to be highly significant ($p< 0.05$), but changes in TC (8513.33 ±2415.4, 9480 ±2820.13), DC-N(58 ± 12.00, 71.83 ± 10.732), L(26.66±9.08, 22.7± 10.61), ESR(26.98 ±12.89, 24.8 ±11.11) were found to be statistically insignificant ($p> 0.05$)

Table 1 :

	Weavers (n=30)	Non weavers (n=30)	P value
Age (yrs)	43.26 ±5.46	45.13 ±4.36	-
BMI(kg/sq.m)	23.93 ±3.89	24.74 ±3.22	-
Total Count(Cells/Cu.Mm)	8513.33 ±2415.42	9480 ±2820.13	0.8
Neutrophils(%)	58± 12	71.83 ±10.73	0.1

Original Article

Prescription audit of a teaching hospital in South India using World Health Organization core prescribing indicators – A cross-sectional study

R. Meenakshi, Nitya Selvaraj, Nishanthi Anandabaskar, Anuranjani Dhamodharan, A. K. Badrinath[1], Meher Ali Rajamohammad

Departments of Pharmacology and [1]General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Aim: World Health Organization (WHO) core prescribing indicators are highly standardized tools in reliably assessing the essential aspects of drug utilization pattern. It is critical that the rational use of drug prescribing is scrutinized for the utmost benefit of patient welfare. In this study, we aim to assess the prescription pattern and prescribing behavior of physicians using the WHO-recommended core prescribing indicators at a teaching hospital in South India.

Materials and Methods: A prospective, descriptive cross-sectional study was conducted in the general medicine outpatient department of a tertiary care hospital for a period of 1 month in June 2019. A total of 600 prescriptions were sampled based on the WHO "How to investigate drug use in health facilities" document recommendation. The WHO guidelines and methods were observed to ensure data reliability. Descriptive statistical analyses such as frequencies, percentages, mean, and standard deviation were used to present the data.

Results: The WHO core prescribing indicators analysis revealed that the average number of drugs per encounter was 2.38 ± 1.1 and only 796 (55.4%) of the drugs were prescribed by generic name. Whereas, the percentage of encounters prescribed with an antibiotic 44 (7.3%) and an injection 63 (10.5%) was less than the ideal recommendations as per WHO and 1265 (88%) of the drugs were prescribed from the National List of Essential Medicines.

Conclusion: This study on prescription pattern audit done using the WHO core prescribing indicators highlights that prescriptions encountered with antibiotic and injection use were in accordance with the WHO recommendations.

Keywords: Fixed-dose combination, generic drugs, prescribing indicators, prescribing pattern, prescription audit, rational prescribing

Address for correspondence: Dr. Nitya Selvaraj, Department of Pharmacology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry - 605 107, India.
E-mail: drnityapharmacology@gmail.com
Received: 07-06-20, **Revised:** 25-09-20, **Accepted:** 03-10-20, **Published:** 08-01-21

INTRODUCTION

Prescribing pattern behavior reflects the health promoter's responsibilities toward the rational use of drugs. Audit of such prescribing practice aids in improving the drug use pattern by identifying the nuances and critical steps

Access this article online	
Quick Response Code:	Website: www.picronline.org
	DOI: 10.4103/picr.PICR_172_20

How to cite this article: Meenakshi R, Selvaraj N, Anandabaskar N, Dhamodharan A, Badrinath AK, Rajamohammad MA. Prescription audit of a teaching hospital in South India using World Health Organization core prescribing indicators – A cross-sectional study. Perspect Clin Res 2022;13:132-6.

Original Article

Access this article online

Quick Response Code:

Website: www.jehp.net

DOI: 10.4103/jehp.jehp_234_20

Assessment on knowledge and practice of postexposure prophylaxis of human immuno-deficiency virus among staff nurses and paramedical workers at a tertiary care hospital in South India

Harsha Vardhini, Nitya Selvaraj, R. Meenakshi

Abstract:

INTRODUCTION: Adequate knowledge about the presence of postexposure prophylaxis (PEP) against human immuno-deficiency virus (HIV) is imperative for health-care workers. This study focuses on the evaluation of the present knowledge and practice of nurses and paramedical workers on the post exposure prophylaxis against HIV.

AIM: The aim of this study is to assess and compare the knowledge and practice of PEP against HIV among Staff Nurses and Paramedical workers.

SUBJECTS AND METHODS: A descriptive cross-sectional questionnaire study about the knowledge and practice of PEP against HIV among Staff nurses and Paramedical workers done at a tertiary care hospital in South India. The analysis of the data was performed using SPSS software version 24. The statistical tests used to compare the knowledge between nurses and paramedical workers was Chi-square test. $P < 0.05$ was considered statistically significant.

RESULTS: About 389 nurses and 66 paramedical workers participated in the study. An overall of 65.4% of the study participants had a good level of knowledge, higher ($P = 0.000$) among nurses (71.1%) compared to paramedical workers (36.8%). However, only 23% of nurses and 14.3% of paramedical workers received PEP after a needle prick injury.

CONCLUSION: This study revealed a low-level practice of HIV PEP among staff nurses and paramedical workers despite their good knowledge. This can be improved by providing formal training sessions to the health care workers.

Keywords:

Human immuno-deficiency virus, nurses, paramedical workers, postexposure prophylaxis

Introduction

Human immunodeficiency virus (HIV)/acquired immuno-deficiency syndrome (AIDS) is one of the most serious public health challenge, and also a leading cause of mortality prevailing across the globe.[1] At the end of 2016, the WHO statistics highlighted that 36.7 million people are living with HIV.[2] Moreover, in the same year (2016), India was declared to be the third-most HIV epidemic country having 2.1 million sufferers.[3] Of which 0.27% are residing in Tamil Nadu seen during 2014.[4] The Indian Centre for Disease Control has charted out the guidance to prevent the occurrence of new infection by providing technical assistance, as well as increasing the access to service for people who are living with HIV by strategies like strengthening laboratory systems and district-level capacity to address HIV.[5]

Department of Pharmacology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Address for correspondence: Dr. Nitya Selvaraj, Department of Pharmacology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India. E-mail: drnityapharmacology@gmail.com

Received: 16-03-2020
Accepted: 28-05-2020
Published: 30-10-2020

How to cite this article: Vardhini H, Selvaraj N, Meenakshi R. Assessment on knowledge and practice of postexposure prophylaxis of human immuno-deficiency virus among staff nurses and paramedical workers at a tertiary care hospital in South India. J Edu Health Promot 2020;9:279.

International Journal of Basic & Clinical Pharmacology
Anandabaskar N et al. Int J Basic Clin Pharmacol. 2020 Jan;9(1):138-145
http://www.ijbcp.com

pISSN 2319-2003 | eISSN 2279-0780

DOI: http://dx.doi.org/10.18203/2319-2003.ijbcp20195776

Original Research Article

A study to assess the completeness of informed consent documents for biomedical research on human participants submitted to the institutional ethics committee of a tertiary care hospital

Nishanthi Anandabaskar[1], Mourouguessine Vimal[2]*, Amol Rambhau Dongre[3], Rajendrakumar Nivaratirao Kagne[4]

[1]Department of Pharmacology, [2]Department of Pathology, [3]Department of Community Medicine, [4]Department of Forensic Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Received: 21 October 2019
Revised: 04 December 2019
Accepted: 05 December 2019

***Correspondence:**
Dr. Mourouguessine Vimal,
Email: drvimalm@gmail.com

ABSTRACT

Background: Informed consent is an essential pre-requisite for research on human participants. However, many studies have shown that informed consent documents (ICDs) are incomplete and lack many of the essential elements. The objective of the study was to assess the completeness of ICDs submitted to an institutional ethics committee (IEC) against the Indian Council of Medical Research (ICMR) ethical guidelines for biomedical research on human participants.

Methods: This is a retrospective cross-sectional study. The ICDs submitted to the IEC during the period from January 2015 to December 2017 were reviewed for completeness, with the help of a checklist which is based ICMR ethical guidelines for biomedical research on human participants 2006.

Results: A total of 212 ICDs were reviewed during the study period. More than 50% of the ICDs have clearly explained many of the essential elements like nature and purpose of the study (62.3%), voluntary participation (98.6%), procedures (68.9%), risks (71.2%), benefits (92.9%), alternative treatments (60.7%), maintaining confidentiality (99.1%), no loss of benefits on withdrawal from the study (87.8%) and contact details of principal investigator (99.5%). However, the other essential elements of the ICD are either not mentioned or not clearly explained.

Conclusions: This study has shown that although majority of the ICDs submitted for review by the IEC have mentioned many of the essential elements, some of the elements like contact details of Chairman of IEC, future use of sample, compensation for trial related injury and provision of counseling for consent of genetics testing have not been stated.

Keywords: Informed consent form, Institutional review board, Participant information sheet, Research proposal

INTRODUCTION

Informed consent is an essential prerequisite for conduct of any research on human participants. It respects the autonomy of the participants and protects their freedom of choice. Informed consent is defined as "a continuous process, involving three main components - providing relevant information to potential participants, ensuring competence of the individual and the information is easily comprehended by the participants, and assuring voluntariness of participation".[1] The informed consent process encompasses a comprehensive discussion about

Ubrogepant: The First Gepant to Pass Food and Drug Administration for Acute Migraine

Sivagourunadin Kiruthika, Rajendran Priyadharsini
Department of Pharmacology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India

Abstract

Migraine is one of the most common and disabling forms of primary headache disorders. It is characterized by the presence of unilateral pulsatile headache associated commonly with nausea, vomiting, photophobia, and phonophobia lasting for about 4–72 h. Currently, nonsteroidal anti-inflammatory drugs, ergot alkaloids, and triptans are the most commonly used drugs to abort an acute attack of migraine. Management of acute migraine is becoming a challenging task to physicians and patients due to several drawbacks faced with the use of aforementioned drugs. This lacuna is being filled up by developing drugs against novel targets such as calcitonin gene-related peptide (CGRP) and pituitary adenylate cyclase-activating peptide. In December 2019, the US Food and Drug Administration (FDA) approved ubrogepant for the treatment of acute migraine with or without aura in adults. Ubrogepant belongs to a new class of drugs called "Gepants" which are small molecules targeted against the CGRP receptor. The recommended initial dose is 50 mg or 100 mg orally. It follows first-order kinetics and is metabolized to a major extent by CYP3A4-mediated mechanisms. Compared to placebo, ubrogepant causes significant and rapid freedom from headache, pain and absence of migraine-associated most bothersome symptoms. Nausea, vomiting, and dry mouth are some of its common adverse effects. Ubrogepant with advantages such as good oral bioavailability, lack of vasoconstrictor action, and lack of hepatotoxicity might emerge as a promising drug for terminating an acute attack of migraine in the future. However, long-term clinical studies are needed to ascertain its safety profile.

Keywords: Acute migraine, calcitonin gene-related peptide antagonist, gepant, ubrogepant

Introduction

Migraine is a form of primary headache disorder and it is characterized by the presence of unilateral pulsatile headache associated commonly with nausea, vomiting, photophobia, and phonophobia. It is prevalent in about 11.6% of global population. Due to its chronic nature and severity, the quality of life and work efficiency are impaired causing economic burden.[1] Nonsteroidal anti-inflammatory drugs, ergot alkaloids, and triptans which are the currently used drugs to abort an acute attack of migraine carry the following disadvantages such as poor tolerability and varied efficacy among patients and they are also contraindicated in ischemic heart disease patients. These drawbacks led to the development of a new class of drugs called "Gepants" which are small molecules targeted against the calcitonin gene-related peptide (CGRP) receptor. Unfortunately, the clinical trials done earlier with other gepants such as olcegepant and telcagepant were terminated due to poor oral bioavailability of olcegepant and hepatotoxicity caused by telcagepant.[2] Ubrogepant is the first gepant to be approved by the Food and Drug Administration (FDA) in December 2019 for the treatment of acute migraine with or without aura in adults.[3]

Mechanism of Action

Ubrogepant is an antagonist of the neuropeptide CGRP receptor. During an acute attack of migraine, trigeminal nerve stimulation causes release of CGRP, leading to vasodilation and neurogenic inflammation in meninges. Ubrogepant, by blocking the CGRP receptor counteracts the vasodilation mediated by CGRP without causing any vasoconstriction.[3,4]

Address for correspondence: Kiruthika Sivagourunadin, Department of Pharmacology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry - 605 006, India.
E-mail: drkiruthikasivagourun@gmail.com

Access this article online

Quick Response Code:

Website: www.jpharmacol.com

DOI: 10.4103/jpp.JPP_3_20

How to cite this article: Kiruthika S, Priyadharsini R. Ubrogepant: The first gepant to pass food and drug administration for acute migraine. J Pharmacol Pharmacother 2020;11:33–4.

Received: 13-01-2020 Revised: 24-01-2020
Accepted: 06-05-2020 Web Publication: 12-09-2020

IJPRP

Indian Journal of Pathology: Research and Practice
Volume 9 Number 1 (Part II), January - April 2020
DOI: https://dx.doi.org/10.21088/ijprp.2278.1480.91.20.28

Original Research Article

Immunohistochemical Subtyping of Hashimoto Thyroiditis With Respect to IgG4 Marker

Revathi G[1], Erli Amel Ivan[2], Vimal M[3]

[1]Postgraduate, [2]Professor and Head, [3]Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry 605107, India.

Corresponding Author:
Vimal M, Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry 605107, India.

E-mail: drvimalm@gmail.com

Received on 21.03.2020

Accepted on 26.04.2020

Abstract

Background: Hashimoto thyroiditis (HT) is the most commonest form of autoimmune thyroiditis with heterogenous clinical presentation. Recently a type of Hashimoto thyroiditis with dense lymphoplasmacytic infiltration and marked fibrotic changes with increased number of IgG4-positive plasma cells and serum IgG4 have been reported in the literature and they have a close relationship to IgG4-related disease (IgG4-RD). On the basis of immunostaining for IgG4, HT was divided into an IgG4 thyroiditis group and a non-IgG4 thyroiditis group and their clinical and histopathological features were studied. *Aims and Objectives:* To categorize Hashimoto thyroiditis with reference to IgG4-positive plasma cell infiltration and to study the histopathological characteristics of each group. *Materials and Methods:* It was a retrospective cross sectional study for a period of one and half year. Cases which were histopathologically diagnosed as Hashimoto thyroiditis were included in the study. Immunohistochemistry marker done for IgG4 and the foci with the highest density of positive cells was evaluated. *Results:* Among the 13 cases of Hashimoto thyroiditis 8 cases were subtyped into IgG4 thyroiditis group and 5 cases into non IgG4 thyroiditis group based on immunohistochemistry. All the cases were females in both the groups and the age of presentation in IgG4 thyroiditis was younger when compared to non IgG4 thyroiditis. Histopathologically, IgG4 thyroiditis showed marked fibrosis and moderate to severe lymphoplasmacytic infiltration with increased IgG4 positive plasma cell infiltration when compared to non IgG4 thyroiditis. *Conclusion:* Immunostaining of IgG4 can help in the subtyping of Hashimoto thyroiditis and are closely related with IgG4 related diseases. IgG4 Hashimoto thyroiditis presents with a distinct histopathological features when compared to non IgG4 thyroiditis.

Keywords: Hashimoto thyroiditis; IgG4; Immunohistochemistry; Fibrosis; Histopathology.

How to cite this article:
Revathi G, Erli Amel Ivan, Vimal M. Immunohistochemical Subtyping of Hashimoto Thyroiditis With Respect to IgG4 Marker. Indian J Pathol Res Pract. 2020;9(1 Part II):182-187.

Online Journal of Health and Allied Sciences
Peer Reviewed, Open Access, Free Online Journal
Published Quarterly : Mangalore, South India : ISSN 0972-5997
Volume 19, Issue 2; Apr-Jun 2020

Case Report

Sunrays and Granules: Rare Presentation of a Great Mimicker

Authors:
Mourougnessine Vimal, Professor,
Abinitha Satchidanandam, Assistant Professor,
Aishwarya R, Student,
Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry.

Address for Correspondence
Mourougnessine Vimal,
No.21, Narmatha Street,
Vasanth Nagar, Muthialpet,
Puducherry – 605003, India.
E-mail: drvimalm@gmail.com.

Citation
Vimal M, Satchidanandam A, Aishwarya R. Sunrays and Granules: Rare Presentation of a Great Mimicker. *Online J Health Allied Scs.* 2020;19(2):13. Available at URL: https://www.ojhas.org/issue/34/2020-2-13.html

Submitted: Jun 24, 2020; Accepted: Sep 8, 2020; Published: Sep 20, 2020

Abstract: Actinomycosis is a chronic granulomatous infectious disease caused by gram positive bacteria Actinomyces. It is characterised by variable presentation that mimics malignancy, tuberculosis, nocardia and other fungal organisms. We present a rare case of primary cutaneous actinomycosis in a 36 years old female in left upper extremity which was clinically suspected as lipoma. May Grunwald Giemsa stained fine needle aspiration smears revealed the classic colonies of Actinomyces with basophilic radiating filaments, confirming the diagnosis of actinomycosis. A high degree of clinical suspicion is needed for early diagnosis of Actinomycosis which is readily treatable and curable if appropriately managed.

Key Words: Actinomycosis, Swelling, Lipoma, FNAC

Introduction:

Actinomycosis is a rare, chronic granulomatous infectious disease caused by gram positive bacteria Actinomyces. It is characterised by formation of abscess, sinuses and fibrosis usually in cervicofacial region (60%), respiratory (20%), digestive (15%) and genitourinary tract where it is a great mimicker of malignancy, tuberculosis, nocardia and other fungal infections. Involvement of other organs and body parts is uncommon and is usually a secondary lesion from other sites mentioned above.

Primary cutaneous actinomycosis of extremities is highly uncommon with less than 50 case reports in the literature(1). It is reported to occur in 3 % cases(1) and is due to secondary involvement from common primary sites by hematogenous dissemination . A case of primary actinomycosis of left upper extremity in a 36-year-old female is presented in this case report because of its rarity in location, presentation and to emphasis on its masquerading nature.

Case History:

A 36-year-old female presented to the hospital with the chief complaint of a swelling over left forearm for 1 year which was gradual in onset and slowly increasing in size. She developed pain over the swelling for 2 weeks. There was no prior history of fever and trauma. Local examination revealed a 2x2 cm swelling with restricted mobility, firm consistency, ill-defined borders and was tender on palpation. The overlying skin appeared normal. Based on the clinical examination a provisional diagnosis of lipoma was made.

Fine Needle Aspiration Cytology (FNAC) of the swelling was performed and 0.5 ml of clear fluid was aspirated. May Grunwald Giemsa stained smears showed colonies of Actinomyces with basophilic radiating filaments with a sun ray appearance surrounded by neutrophils. Many well-formed granulomas composed of histiocytes were also seen. (Figures 1 and 2)

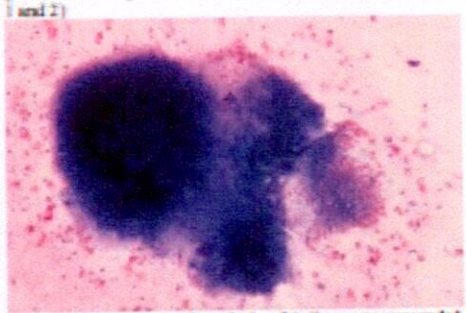


Fig.1: FNAC smears showing colonies of Actinomyces surrounded by neutrophils (May-Grünwald-Giemsa, x100X)

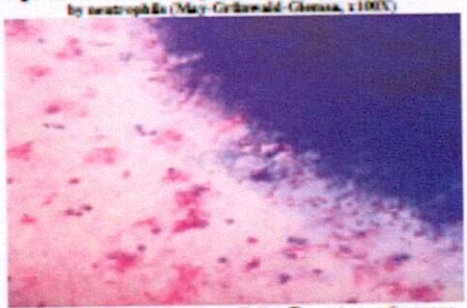


Fig.2: FNAC smears showing radiating filamentous actinomyces surrounded by neutrophils (May-Grünwald-Giemsa, x400X)

ORIGINAL ARTICLE

Phytochemical Constituents of Leaves of *Moringa oleifera* Grow in Cuddalore District, Tamil Nadu, India

Ramalingam Sudha[1], Xavier Chandra Philip[2], KVP Suriyakumari[3]

Abstract

Aim: The plant products are used to treat various diseases instead of synthetic drugs owing to their least side effects. One of the important plants is *Moringa oleifera*. The micronutrients of *Moringa oleifera* leaves (MOL) have anti-inflammatory, antidiabetic, antihypertensive, antiepileptic, and antitumor properties. Literature explored the contents of MOL from various countries and thus, the present study aims to evaluate the existence of phytochemicals present in the MOL grow in the Cuddalore District, Tamil Nadu, India.

Materials and methods: The maceration technique was employed to extract the active contents of the powdered leaves with 70% ethanol. The acquired crude extract was subjected to detailed phytochemical analysis. We have tested MOL for the presence of alkaloids (Mayer's test), proteins and amino acids (xanthoproteic test and ninhydrin test), flavonoids (alkaline reagent test), glycosides (Legal's test), saponins (foam test), and tannin (gelatin test). The presence of reducing sugars, carbohydrates, phytosterols, and triterpenoids was tested by Fehling's test, Molisch's test, Liebermann–Burchard's test, and Salkowski's test, respectively. Standard chemical tests were used for testing steroids, anthraquinones, and fats and fixed oils.

Results: Stronger presence of some chemical compounds like proteins and amino acids, flavonoids, alkaloids, steroids, and saponins as well as other ingredients were detected. The extract showed weak positivity for phytosterols, reducing sugars, and fats and fixed oils. But carbohydrates, anthraquinones, tannin, and triterpenoids were not identified in the extract of MOL.

Conclusion: The presence of alkaloids, flavonoids, and saponins can exhibit stronger antioxidant activity against the free radicals, which are of great medicinal value. The active components extracted from MOL may be useful as a drug in various diseases induced by the reactive oxygen species.

Keywords: Drumstick leaves, Maceration, Phytochemical, Saponins.

SBV Journal of Basic, Clinical and Applied Health Science (2020); 10.5005/jp-journals-10082-02270

Introduction

The plant products are used to treat various diseases instead of synthetic drugs owing to their least side effects. Hence, the field of ancient medicine reached peak growth in the last few years. In India, the drugs derived from plants form the major component of traditional medicine like Ayurveda and Siddha. The investigation of herbal substances was conducted due to their efficient medicinal value, which laid the platform for the discovery of newer medicines to cure various ailments.[1] One of the important plants with its great medicinal value is *Moringa oleifera* leaves (MOL), which belongs to the monogeric genus *Moringaceae* family.

The *Moringaceae* family contains 13 species among which one of them is *Moringa oleifera*. It is widely cultivated in countries like India, Pakistan, Afghanistan, Bangladesh, Sri Lanka, other parts of Asia, the Arabian Peninsula, Africa, southern Florida, West Indies, Paraguay, Peru Mexico, and Brazil.[2] It is a small, fast-growing deciduous tree with soft white wood and gummy bark that usually grows up to 9-m height. The feathery foliage of tripinnate leaves originates from the main axis which may have a length of 30–75 cm.[1,2] In India, the leaves and pulp form an integral part of the food for many centuries. All the parts of *M. oleifera* like leaves, pods, and pulps of drumstick, bark and root are traditionally used for various diseases, but leaves are most commonly used and thus, a Tamil proverb mention the great value of the tree as "*Murungaiyai nattavan veerungaiyodu povan*" which means a man who cultivates and eats all parts of the tree will become strong physically and never uses a walking stick in his geriatric period.

[1,3]Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

[2]Department of Anatomy, Mahatma Gandhi Medical College and Research Institute, Puducherry, India

Corresponding Author: Ramalingam Sudha, Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India, Phone: +91 9585428166, e-mail: sudhaanatomy@gmail.com

How to cite this article: Sudha R, Philip XC, Suriyakumari KVP. Phytochemical Constituents of Leaves of *Moringa oleifera* Grow in Cuddalore District, Tamil Nadu, India. J Basic Clin Appl Health Sci 2020;3(4):164–167.

Source of support: Nil

Conflict of interest: None

The MOL is a significant source for protein, amino acids, calcium, potassium, iron, zinc, as well as vitamins like A, B, C, and E.[2] It also has polyphenol, phenolic acids, flavonoids, alkaloids, a simple sugar, tannins, vitamins, rhamnose, carotenoids, phytates, isothiocyanates, saponins, oxalates, and triterpenoid glucosinolates.[2] Many investigations explored that the micronutrients of MOL have anti-inflammatory, antidiabetic, antihypertensive, antiepileptic, and antitumor properties.[3] It shows high antioxidant property against free radicals induced tissue damage because it contains phenolic compounds.[3] Literature explored the contents of MOL from various countries and thus, the present study aims to evaluate the existence

JOURNAL OF CRITICAL REVIEWS

ISSN- 2394-5125 VOL 7, ISSUE 15, 2020

A Histological Evaluation on The Protective Effect of Ethanolic Extract of Moringa Leaves on 4G-Cell Phone-Irradiated Testes of Wistar Rats

SUDHA RAMALINGAM[1] / Dr. X. CHANDRA PHILIP[2] / Dr. K.V.P. SURIYAKUMARI[3]

[1]Tutor, Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.
[2]Professor, Department of Anatomy, Mahatma Gandhi Medical College and Research Institute, Puducherry, India.
[3]Professor, Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.

ABSTRACT

Introduction

Infertility is the growing problem in modern world. Fifty percent of infertility cases are paid for by the malefactor. Scientific researches revolve around the use of cell phones and infertility. Few studies have explored the effects of 2G, 3G and 4G-cell phone radiation on spermatogenesis and some other studies offer conflicting views. The aim of this research was to study the impact of electromagnetic radiation (EMR) on the testis of Wistar rats over a span of two months from a 4G mobile phone and to assess the potential radio-ameliorative efficiency of leaves of Moringa oleifera (MOL).

Materials and Method:

The male Wistar rats were divided into five groups. Control group (n=3) without mobile phone; Sham group (n=3) with mobile phone in switched-off mode; MOL-2 group (n=6) obtained oral 200 mg of ethanol extract of MOL /kg body weight for two months; R2 group (n=6) subjected to 4G-EMR for two months for 96 minutes/day; R2+MOL-2 (n=6) group exposed to EMR and treated concurrently with MOL extract for two months. After the experimental period, rats were sacrificed and testes were removed to analyze the morphometry and histological alterations.

Results

4G mobile phone-EMR caused a significant reduction in the length and thickness of the testis in the R2 group as compared to control, sham and MOL-2 groups. The ethanolic extract of MOL could not retrieve the variables to normal in the R2+MOL-2 group. But the extract retained the histo-morphology of the testes from the effects of 4G- EMR.

Conclusion

4G-LTE-radiation can influence spermatogenesis to some degree by adversely affecting the the histological aspect of the testes. Oral administration of ethanol extract of MOL will preserve the properties of testes from cell phones via the antioxidant properties of its phytochemicals.

Keywords: 4G-EMR; Moringa Leaves; Morphometry; Testis; Histology; Antioxidants.

Introduction

Male infertility has become a great concern nowadays. It is often connected with multiple environmental and occupational exposures.[1] Mobile phone technology reached a maximum peak of growth in the last decade. This technology is used by more than two-thirds of the global population for communication. The invention of the first-generation of the cell phone known as analog phone works at 450-900 MHz, the second-generation (digital phone) work at 850-1900 MHz [Global System for Mobile Communications, GSM], and the third-generation phone works at around 2000 MHz.[2] The prolonged use of a mobile phone affects the biological system of the body through radio frequency induced-electromagnetic radiation (RF-EMR) as non-ionizing radiation.[3,2] The production of RF-EMR depends on the frequency of the mobile phone handled. The greater the frequency, the higher the probability of more radiant energy being absorbed into the human body.[2] When using a hands-free tool such as Bluetooth, most men hold their mobile phones in a trouser pocket (or attached to the straps on their waist). This equipment exposes the testes to mobile phone radiation with a higher power density than a mobile phone in a trouser pocket in the 'Standby mode' Desai. Such RF-EMR can negatively influence the reproductive capacity of humans and animals. Various researchers documented the reproductive effects of RF-EMR as decreased primary spermatocyte and sperm count and abnormal sperm morphology. [3,2]

RF- EMR may disturb the bodily function by producing hyperthermia as thermal effects or through non-thermal effects like disrupting the plasma membrane of the cell; generating oxidative stress within the cell by increasing the output of reactive oxygen species (ROS) or by decreasing the antioxidant enzyme activity; causing DNA damage.[4]

Literature provided shreds of evidence that 2G and 3G mobile phone-radiations could cause detrimental effects on the male reproductive system.

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACEUTICAL SCIENCES

Published by JK Welfare & Pharmascope Foundation Journal Home Page: www.pharmascope.org/ijrps

Hepatoprotective potential of *Indigofera tirunelvelica* Sanjappa: *in vitro* and *in vivo* studies on CCl_4 induced wistar albino rats

Subburayalu S*[1], Asha KRT[2], Deepa Somanath[3], Palavesam A[4]

[1] Department of Biochemistry, KR College of Arts and Science, KR Nagar, Kovilpatti, Tamil Nadu, India
[2] Department of Biochemistry, Government Arts College, Paramakudi, Tamil Nadu, India
[3] Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
[4] Department of Animal Science, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

Article History:

Received on: 09 Jun 2020
Revised on: 10 Jul 2020
Accepted on: 16 Jul 2020

Keywords:

Indigofera tirunelvelica,
Antioxidants,
Hepatotoxicity-CCl4,
Hepatoprotective activity

ABSTRACT

The hepatoprotective efficiency of Indigofera tirunelvelica Sanjappa whole plant against CCl_4 induced hepatotoxicity was examined. Rat hepatocyte monolayer culture and wistar albino rats were exercised as *in vitro* and *in vivo* screening models of protective agent for liver. In *in vitro* analyses, the whole plant ethanolic extract of Indigofera tirunelvelica Sanjappa were inspected. Silymarin was chosen as a standard treatement drug. *In vitro*, free radical scavenging property was also evaluated. In animal studies, hepatotoxicity was produced in Wistar albino rats by dispensing CCl_4. The degree of hepatotoxicity was examined by determining the ranges of serum enzyme. The antioxidant parameters such as superoxide dismutase, catalase, reduced glutathione, and malondialdehyde of the hepatocytes were also evaluated. In *in vitro* studies, ethanol extract of *I. tirunelvelica* whole plant was identified to be the most active than other assessed extracts. Besides, whole plant ethanol extract of *I. tirunelvelica* was noticed to be rich in phenolic and flavonoids. It exhibited expressive free radical scavenging property versus diphenylpicryl hydrazyl (DPPH) and superoxide ion radicals. In the animals studies, whole plant ethanolic extract of *I. tirunelvelica* at a ranges of doses (100, 200 and 400 mg/kg body weight) revealed considerable amount of protection against CCl_4 induced hepatotoxicity as evident by the protection of CCl_4 induced changes biochemical parameters. The results of the present study suggested that the significant hepatoprotective property of whole plant ethanol extract of *I. tirunelvelica* against CCl_4 induced hepatotoxicity and intimates its use as a potential medicinal drug for liver diseases.

*Corresponding Author

Name: Subburayalu S
Phone: 9344902508
Email: krplacement97@yahoo.in

ISSN: 0975-7538

DOI: https://doi.org/10.26452/ijrps.v11i4.3432

Production and Hosted by

Pharmascope.org

INTRODUCTION

Oxidative stress has been linked in the acute and chronic development of diseases in liver injury in a variety of pathophysiological conditions such as alcoholic liver injury, intrahepatic cholestasis, hepatotoxin exposure, viral liver disease and also liver ischemia (Stehbens, 2003); (Jaeschke, 2003); (Serafini *et al.*, 1998). Excessive synthesis of reactive oxygen species (ROS) and reactive nitrogen species (RNS), together with a substantial decline of antioxidant defence in these diseased conditions, hinders numerous cell performances throughout the

Original Research Article http://doi.org/10.18231/j.tjp.2020.011

Suicide attempt among adolescent in Tamil Nadu: A case-control study

Vimoth Krishna Dass[1], Arun Prasanna Chandrasekaran[2], Vinayagamoorthy Venugopal[3]*, Asokkumar Muthu[4], Gandhibabu Ramanathan[5]

[1]Associate Professor, [2,3]Assistant Professor, [4]Professor and Head, [5]Professor, [1,2,4,5]Dept. of Psychiatry, [3]Dept. of Community Medicine, [1,3]Sri Manakula Vinayagar Medical College & Hospital, Puducherry, [2]Government Theni Medical College, Theni, Tamil Nadu, [4,5]Rajah Muthiah Medical College and Hospital, Annamalai University, Tamil Nadu, India

***Corresponding Author: Vinayagamoorthy Venugopal**
Email: drvinayagamoorthy@gmail.com

Abstract

Introduction: Suicide is a complex social issue and a serious global health problem. Its incidence among adolescents is increasing. Understanding of risk factors helps early detection and prompt treatment of high-risk youngsters.

Materials and Methods: It was a hospital-based case-control study carried out among 60 adolescent suicide attempters and 60 of their normal counterparts for the period of one year. Pretested structured questionnaire was used to collect information. Ethical principles were followed throughout the study. SPSS version 24 was used to do the analysis. Odd's ratio (OR) and its 95% confidence interval (CI) were calculated as a measure of the strength of association between risk factors and suicide attempts.

Results: Among the study participants, 70% were in the age group of 16 – 18 years and 45% were males. The identified risk factors for suicide attempt were, presence of psychiatric illness (OR-7.8; 95% CI: 3.3-19), substance abuse among family members (OR-4.3; 95% CI: 2-9.3), family history of attempted suicide (OR-7.2; 95% CI: 1.5-3.3), family history of completed suicide (OR-3.6; 95% CI: 1.2-1.1) and residence at rural areas (OR-2.8; 95% CI: 1.2 – 6.3). Suicide intent score was significantly correlated with various standard scoring tools for stress and depression among cases.

Conclusion: The established risk factors should be considered in creating an effective intervention program and strategies with intersectoral collaboration and coordination to prevent suicide among high-risk adolescents.

Keywords: Adolescent, Attempted suicide, Case-control study, Risk factors.

Introduction

Suicide is a complex social issue and a serious public health problem. Suicidal behavior is a spectrum that ranges from suicidal ideation at one end to completed suicide at the other end. World Health Organization reports that every year nearly 800,000 deaths occur due to suicide worldwide.[1] Suicide is the second leading cause of death among youngsters (15 to 29 years old) globally and its incidence rate is increasing.[2] More than 78% of global suicides occur in low and middle-income countries.[3] In India, over one lakh lives are lost every year due to suicide and in the last three decades, the suicide rate was found to be increased by 43%.[4] The National Crime Record Bureau, report reveals that South Indian states has the highest suicide rate among India and Tamil Nadu stands in third position with 18.6/100,000 population.[5]

As there is no effective protocol to predict suicide among adolescents in routine clinical practice, improving the recognition and understanding of clinical, psychological, sociological, and biological factors could help in the detection of high-risk youngsters so as to assist in treatment options. Therefore the present study was designed with the objectives to assess the association of childhood adversity, demographic factors and psychiatric co-morbidities with adolescent suicide attempt. We also tried to identify the correlation between suicide intent score with stressful life events, hopelessness and depressive scores among suicide attempters.

Materials and Methods

Study setting and design

Our study was an age and gender-matched case-control study that was carried out in a tertiary care teaching hospital situated in Cuddalore district of Tamil Nadu. It is a 1000 bedded teaching hospital. The average outpatient and inpatient load of Psychiatry department per day is 80 and 20 respectively. The department admits and provides care to nearly 150 attempted suicide patients every year.

Study population

Cases were adolescents belonged to both genders and in the age group of 13 to 18 years, admitted with the history of attempted suicide in the emergency department and were referred to the Department of Psychiatry for providing care and support during the year 2012. Subjects with the stable physical condition who could undergo detailed assessment were included. Those who were in the state of disorientation and confusion which interfered with the administration of rating scale to them and those without a reliable informant were excluded. Controls were the adolescents who accompanied those patients admitted to any other departments of the hospital with complaints other than the psychiatric disorder. They were selected in such a way their age and gender were matched with the selected cases.

Sampling and sample size

Sample size was calculated to be 60 cases and 60 controls using OpenEpi software version 3.0, taking the exposure of cases to worrying issues in family as 65% and exposure of controls to same risk factor as 35.3% and odds ratio of 3.4,

Determinants of Categories of TB Retreatment with Special Reference to Sources of Primary Anti-TB Treatment

Veerabadran Karthikeyan[1] Kalaiselvan Ganapathy[2]

[1] Department of Community Medicine, Government Tiruvannamalai Medical College and Hospital, Tiruvannamalai, Tamil Nadu, India
[2] Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Address for correspondence Kalaiselvan Ganapathy, MD, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India (e-mail: kalaiselvanmd@gmail.com).

J Health Allied Sci [NS] 2020;10:116–121

Abstract

Introduction Retreatment (previously treated) cases are the tuberculosis (TB) patients who have been treated previously with anti-TB drugs for at least a month and who have now been registered for category II anti-TB therapy. Retreatment cases arise due to inadequate and improper treatment of the new TB cases.

Objective The aim of the study is to assess the information regarding sources of previous TB drug exposure and treatment practices leading to retreatment cases (category II) and determinants leading to retreatment.

Material and Methods It was a community-based cross-sectional study of patients registered as retreatment TB cases under revised national TB control program (RNTCP) in the TB unit of Puducherry between October 2013 and September 2014. The study was held between October 2013 and October 2015. Initially the quantitative data were collected and followed by qualitative data. Data were collected by interviewing the patients using a predesigned questionnaire. Data were entered and analyzed by using Epi Info (Version 3.4.3) software package.

Results Out of the 193 study participants, relapse cases were the most common 50.8%, followed by treatment after default cases 23.8%, failure cases 11.9%, and retreatment others 13.5%. There is a significant association between the retreatment categories such as failure, TAD (treatment after default), retreatment others, and ever usage of tobacco ($p < 0.05$). There is also a significant association between the retreatment categories such as TAD, retreatment others, and ever usage of alcohol ($p < 0.05$). The sources of previous antitubercular therapy for 90.16% retreatment cases were from government health care facilities under RNTCP, whereas for 9.84% retreatment cases the sources of previous antitubercular treatment were private health care facilities. There is a significant association between public health care facility where patients were previously treated for TB and relapse ($p = 0.001$) and private health care facility where patients were previously treated for TB and TAD ($p = 0.008$).

Conclusion As 90% of the patients have utilized the government health services for treatment, it shows the effective functioning of RNTCP-STF (state task force-revised national TB control program) mechanism in Puducherry.

Keywords
- previously treated
- retreatment
- sources of previous treatment
- tuberculosis

published online
August 20, 2020

DOI https://doi.org/10.1055/s-0040-1716313
ISSN 2582-4287.

Indian J Otolaryngol Head Neck Surg
(October 2022) 74(Suppl 2):S2608; https://doi.org/10.1007/s12070-020-02230-z

CORRECTION

Correction to: Role of Total Thyroidectomy in Painful (Symptomatic) Hashimoto's Thyroiditis: Descriptive Study

Atul Mukul Bage[1] · **Pradheep Kalatharan**[1]

Published online: 26 December 2020

Correction to: Indian J Otolaryngol Head Neck Surg
https://doi.org/10.1007/s12070-020-02114-2

The article [Role of Total Thyroidectomy in Painful (Symptomatic) Hashimoto's Thyroiditis: Descriptive Study], written by [Atul Mukul Bage and Pradheep Kalatharan], was originally published online on [07 September 2020] with Open Access under a [This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/].

With the authors' decision to cancel Open Access the copyright of the article changed on [14 September 2020 provided by the OR Support team] to © Association of Otolaryngologists of India 2020 with all rights reserved.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Case Report

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

A Rare Case of Unilateral Penile Fracture with Urethral Rupture involving Distal Shaft of Penis

Shivaji Pattukottai Ramalingam[1], Vijayaraghavan Nandhagopal[2]

[1]Assistant Professor, Dept of General Surgery, Sri Manakulav Vinayagar Medical College Hospital, Puducherry - 605107
[2]Assistant Professor, Dept of General Surgery, Sri Manakulav Vinayagar Medical College Hospital, Puducherry - 605107

Corresponding Author: Shivaji Pattukottai Ramalingam

ABSTRACT

Penile fractures are rare usually occurring after sexual intercourse involving mid or proximal shaft of penis. Case of coital trauma in 25 year old male resulting in penile fracture involving unilateral corpus cavernosum of distal shaft of penis with adjacent urethral injury has been described

Key words: corpus cavernous, urethral injury, penile fracture

CASE REPORT

A 25 year old man presented to the urology clinic with history of sudden onset of pain near the tip of penis with bleeding at the external urethral meatus along with swelling of shaft of penis after sexual intercourse 6 hours before reaching the hospital. On examination, there was blackish discolouration of the distal shaft of penis on the ventral aspect with swelling of prepuce and blood at the tip of urethral meatus. Emergency surgical exploration was done by sub coronal circumferential incision and degloving of penis. There was rupture of ventral corpora cavernosa in the distal part on left side with adjacent ventral urethral injury (Fig 1, Fig 2). Both were oriented transversely. Right corpora cavernosa was normal. Urethra was repaired over 14 fr. Foley's catheter using 4/0 vicryl simple interrupted sutures. Corporal tear was also sutured with 4/0 vicryl by simple interrupted technique. Catheter was removed on 14th post operative day. Patient voided well immediately. On follow-up 2 months after surgery he had normal erections and had good stream of urine.

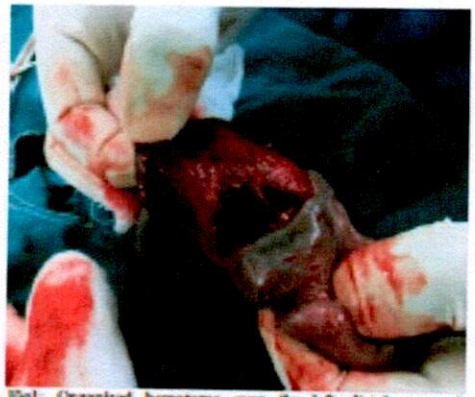


Fig1: Organized hematoma over the left distal corporal rupture and adjacent urethral rupture just proximal to corona.

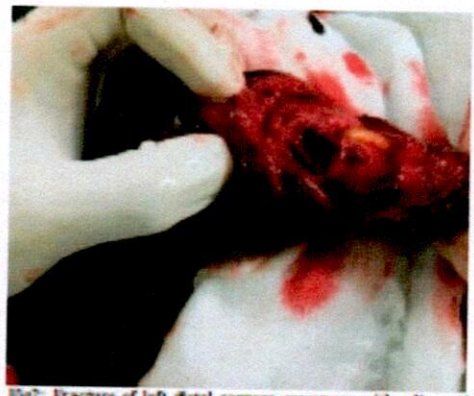


Fig2: Fracture of left distal corpora cavernosa with adjacent urethral injury after placing Foley's catheter.

Case Report

Breast Carcinoma in a 62 year old male: A case report

G.V. Manoharan[1*], Maharaja P[2]

[1] Professor, [2]Assistant Professor,
Department of General Surgery, Sri Manakula Vinayakar Medical College and Hospital, Pondicherry, India
*Corresponding author email: **gvmfhm@yahoo.co.in**

International Archives of Integrated Medicine, Vol. 7, Issue 11, November, 2020.
Available online at http://iaimjournal.com/
ISSN: 2394-0026 (P) ISSN: 2394-0034 (O)
Received on: 08-10-2020 Accepted on: 18-10-2020
Source of support: Nil Conflict of interest: None declared.
How to cite this article: G.V. Manohara, Maharaja P. Breast Carcinoma in a 62 year old male: A case report. IAIM, 2020; 7(11): 56-58.

Abstract

Breast cancer in men is a rare entity. It represents about 0.2% of all cancers, and about 1% of all breast cancers. Presentation is usually a lump or nipple inversion, but is often late, with more than 40% of individuals having stage III or IV disease. Risk factors for MBC are poorly understood and include working in high-ambient temperatures and exhaust fume exposure. MBC is associated with hyperoestrogenic states found in liver disease, Klinefelter's syndrome, gonadal dysfunction or obesity. We describe a case of breast cancer in a 62 year old man who presented with advanced disease.

Key words

Breast carcinoma, Male, Clinical presentation, Diagnostic and therapeutic modalities.

Introduction

Male breast cancer is a rare disease which accounts for about 1% of all breast cancers. Most of studies in breast cancer have been conducted in women and few large studies have been done in men due to the low prevalence [1]. The risk factors for male breast cancer include working at high temperatures and exposure to exhaust fumes. It has an association with hyperestogenic states like liver disease, Klinefelters syndrome, gonadal dysfunction etc. Presentation is usually a lump or nipple inversion, but is often late, with more than 40% of individuals having stage III or IV disease. Most tumors are ductal and 10% are ductal carcinoma in situ. Surgery is usually mastectomy with axillary clearance or sentinel node biopsy. Indications for radiotherapy, by stage, are similar to female breast cancer [2]. Because 90% of tumors are oestrogen-receptor-positive, tamoxifen is standard adjuvant therapy, but some individuals could also benefit from chemotherapy. Hormonal therapy is the main treatment for metastatic disease, but chemotherapy can also provide palliation. The age frequency distribution in women with breast

International Surgery Journal
Manoharan GV et al. Int Surg J. 2020 Dec;7(12):4030-4033
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

Original Research Article

DOI: https://dx.doi.org/10.18203/2349-2902.isj20205352

Comparison of ultrasound and serum amylase in the diagnosis of acute pancreatitis

Manoharan G. V.*, Maharaja P.

Department of General Surgery, Sri Manakula Vinayakar Medical College and Hospital, Pondicherry, India

Received: 19 August 2020
Revised: 21 October 2020
Accepted: 27 October 2020

***Correspondence:**
Dr. Manoharan G. V.,
E-mail: gvmfhm@yahoo.co.in

ABSTRACT

Background: Acute pancreatitis is an inflammatory disease of the pancreas. Though, severe acute pancreatitis constitutes 15-20% of all cases of pancreatitis, in recent times, mortality rate of severe acute pancreatitis has reduced from 30-80% to 15-20%. Ultrasound is the first imaging modality in most centres for the preliminary screening of an acute abdomen.

Methods: In this prospective study between October 2017 to March 2019, 113 patients with clinical signs and symptoms of acute pancreatitis were screened with an ultrasonogram of the abdomen and serum amylase in the emergency room. Patients also underwent a complete physical exam.

Results: In our study 38.9% of patients were in the age group of 45-55 years, 25% in the 35-45 age group and 20.4% in the 55 to 70 age group. 92.9% of the patients were men. 89.4% of the participants had a history of alcoholism. Only 37.2% of the participants who were clinically positive for acute pancreatitis, also showed USG findings for acute pancreatitis while 69% of the clinically positive patients showed serum amylase level positive for acute pancreatitis.

Conclusions: Ultrasonogram though cheap and easily available is not ideal for the diagnosis of acute pancreatitis. As shown in the study serum amylase is able to detect nearly twice as many cases of pancreatitis compared to ultrasonogram. The sensitivity and specificity of ultrasonography to detect acute pancreatitis is too low to use as a diagnostic test but it is a valuable tool in the evaluation of an acute abdomen.

Keywords: Acute pancreatitis, Ultrasound, Serum amylase, Diagnostic accuracy

INTRODUCTION

Acute pancreatitis is an inflammatory disease of the pancreas that also involves surrounding tissues. It has a sudden onset and short duration and it is characterized by self-digestion of the pancreatic parenchyma, necrotizing vasculitis and interstitial fat necrosis due to inappropriate intracellular activation of proteolytic pancreatic enzymes. Symptoms of acute pancreatitis includes abdominal pain localized in the epigastrium in majority of the cases and radiating to the back in half of the cases often accompanied with features of acute abdomen. Acute pancreatitis may cause multi organ failure and occasional death.[1,2]

The severity of acute pancreatitis keeps on increasing, in acute pancreatitis the average mortality rate approaches 2-10%. Most of the cases are not severe and conservative treatment leads to a rapid recovery in the patients.[3]

Acute pancreatitis typically shows increase in serum and urine levels of amylase and lipase. Elevated amylase is not specific to acute pancreatitis and may be caused by bowel obstruction, infarction, cholecystitis, or perforated ulcer. The serum level of the alanine aminotransferase

International Journal of Contemporary Pediatrics
Nair GG et al. Int J Contemp Pediatr. 2020 Apr;7(4):884-890
http://www.ijpediatrics.com

pISSN 2349-3283 | eISSN 2349-3291

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20201148

Original Research Article

Barriers to exclusive breast feeding, the missing links: a cross sectional study from Puducherry, India

Gayathri G. Nair*, Arul Kumaran Arunagirinathan, Nirmal S. R., Rajesh Yadav B.

Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry, India

Received: 26 January 2020
Revised: 03 February 2020
Accepted: 02 March 2020

***Correspondence:**
Dr. Gayathri G. Nair,
E-mail: drgaya3gn@gmail.com

ABSTRACT

Background: Breast milk, the first natural food for a new-born, provides all the energy and essential nutrients an infant requires for the first 6 months of life. The NHFS -4 survey shows only 45.5% of children are exclusively breastfed (EBF) in Puducherry. This study aims at assessing the socio-demographic characteristics associated with exclusive breastfeeding in a tertiary hospital in Puducherry and identify the barriers in the promotion of exclusive breastfeeding.

Methods: Community-based cross-sectional study at a tertiary hospital in Puducherry. Sample size: 115 mothers of 6 months to 2-year-old children, born term gestation with a birth weight of >2.5 kg, attending the Paediatric OPD. Questionnaire-based study comprising of socio-demographic and parameters pertaining to exclusive breast-feeding.

Results: Only 44.3% of the mothers have exclusively breastfed in the first 6 months. Shorter duration of spacing between births and caesarean section had significant negative association with exclusive breast-feeding. Most of the mothers received postnatal counselling on breast-feeding (94%) of which 58% were by health care personnel. Despite that, only a sixth (19%) of them were well versed with proper breastfeeding techniques. Poor secretion (45.3%), sore/inverted nipple (23.5%) amounted to the most common of the barriers. Among working mothers, 42.9% attributed their jobs as the cause for early weaning.

Conclusions: The prevalence of exclusive breastfeeding is still low even among a literate study group. There were no significant association with socio-demographic factors found, but lacunae were identified. A more objective post-natal counselling to mothers involving their caregivers may improve the current scenario.

Keywords: Barriers, Exclusive breastfeeding, Puducherry, Socio-demographic factors

INTRODUCTION

Breast milk, the first natural food for a new-born, provides all the energy and essential nutrients an infant requires for the first six months of life, half of the nutritive requirement for the next six months and thereon one-third of the requirement till two years of age, responsible for the infant's proper physiological growth and development.[1,2] 'Exclusive Breastfeeding' (EBF) implies that nothing else is to be given to the baby except breast milk during the first six months of life.[3] The WHO recommends exclusive breastfeeding for all new-born during the first six months of life.[4]

Breast-feeding, besides providing nutrition, energy, adequate sensory and cognitive development also protects the child from various infections and chronic diseases like obesity, type1/2 diabetes, leukemia and Sudden

International Journal of Contemporary Pediatrics
Jagatha ML et al. Int J Contemp Pediatr. 2020 May;7(5):1191-1194
http://www.ijpediatrics.com

pISSN 2349-3283 | eISSN 2349-3291

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20201662

Case Report

Wilson disease: early screening for better living

Maha Lakshmi Jagatha*, Arulkumaran Arunagirinathan, Bondada Hemanth Kumar

Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry, India

Received: 25 February 2020
Revised: 10 March 2020
Accepted: 30 March 2020

***Correspondence:**
Dr. Maha Lakshmi Jagatha,
E-mail: mahaparvesh23@gmail.com

ABSTRACT

Autosomal recessive diseases are more common among consanguineous marriages noted particularly in southern parts of India. There is a gradual increase in the genome wide homogeneity with the increasing levels of consanguinity. Here we are reporting a case series of such an autosomal recessive condition, namely Wilson Disease (WD), where three children were affected with the disease, who were born out of consanguineous marriages. The first case presented with neuropsychiatric manifestations, the second case and third cases were diagnosed through screening of family members leading to earlier identification of the disease. In these cases consanguinity has been emphasised as the major predisposing factor leading to their manifestations. This case series highlights the importance of screening the other family members of the index case. Conditions such as Wilson disease have an excellent prognosis if pharmacotherapy is initiated appropriately.

Keywords: Consanguinity, Screening, Wilson disease

INTRODUCTION

Wilson Disease (WD), also known as hepatolenticular degeneration is an autosomal recessive disorder caused by the mutations in ATP7B gene which leads to impaired cellular copper transport resulting in excessive accumulation of copper in several organs, most notably the liver, brain and cornea.[1] Clinical presentation of WD ranges from silent carrier to liver failure and irreversible brain damage, leading to death.

CASE REPORT

Case 1

The 11-year-old developmentally normal female child, born to a third-degree consanguineous couple brought with history of gait disturbances for 6 months in the form of swaying on both sides which was gradually progressive in nature. Child also had history of drooling of saliva, slurring of speech and decreased scholastic performance. Her hand writing deteriorated over the past few months and she was noticed to have emotional lability by her parents. There is no history of involuntary movements, seizures, weakness of limbs and paresthesias. No history suggestive of cranial nerve involvement or visual disturbances. She had a past history of jaundice on two occasions for which native treatment was taken. She never had any history of hematemesis. On examination, child was alert, conscious and oriented. Except for dysarthria, rest of the CNS examination was normal. Child had hepatosplenomegaly on abdominal examination.

Slit lamp examination showed bilateral KF rings. USG abdomen showed coarse liver (with surface irregularities

PRACTICE OF DOCUMENTATION AT CASUALTY OF TERTIARY CARE HOSPITAL – AN INTERVENTIONAL STUDY

Ramasamy R.[1], Ganesh Rajendiran[2], Kagne R.N.[3]

[1]Assistant Professor, Department of Forensic Medicine & Toxicology, TMCH, Chennai, [2]Assistant Professor, Department of Forensic Medicine & Toxicology, SMVMCH, Puducherry, [3]Professor, Department of Forensic Medicine & Toxicology, SMVMCH, Puducherry

Abstract

A medical record plays a major role for the patient and health care sector in terms of treatment and making policies on certain diseases. In any suit of negligence, this medical record will help the doctors to defend them. Many a times the complete and accurate documentation only have helped the medical fraternities from getting entangled in various consumer cases made by the patient against the doctors. Even though we have seen so many negligence cases on doctors, documentations are still incomplete in any medical record. There are studies shown that the average time spent by a doctor on a medical record is very less and the scenario is much worse when it comes to critical areas of the hospitals like casualty where the time is very precious in treating the patient and not much of importance is given for documentation. So to identify the current practice of documentation of medical records, this study was carried out to assess the documentation practice of the admission case sheets in the casualty of SMVMCH, Puducherry. An intervention was done to improve the completeness of documentation in the casualty and post-intervention analysis was also done. The results of the study showed that the percentage of documentation out of the 34 variables documented in the admission case sheets found to have significant deficiencies. But following the intervention on improving the documentation there has be a significant decrease of the deficiencies in the documentation practice on all those 34 variables.

Keywords: *Medical record, Documentation, Casualty and Admission case sheet.*

Introduction

In a tertiary care hospital, medical records serve as a tool to provide better clinical care and to act as a means of communication between care providers.[1] Completed ocumentation of this medical record is very important, because the deficiencies in this documentation,have made the doctor's defenseless in medical negligence cases filed against them in the court.[2] Casualty being the first place of contact, a properly documented medical record is needed proper diagnosis and treatment.[3] Thus in view of a good patient care and to prevent a health care provider from negligence suits, a standardized medical record documentation is very essential. This needs to stress on the "Golden Rule" in documentation i.e. **"If it isn't written down, you didn't do it."**[4] Following the Honourable Supreme Court judgement in the year 1995, stating that "doctors also come under the perview of the Consumer Protection Act, 1986 which makes the medical fatemity liable under the consumer forum for deficiencies in the quality care and treatment". To safeguard the physicians from these forums, the only defensive evidence was proper documentation which is the need of the hour.[5] So our study helps in identifying various deficiencies in the documentation of medical records mainly the admission case sheet in the casualty.

Corresponding Author:
Dr. Ganesh Rajendiran
Assistant Professor, Department of Forensic Medicine & Toxicology, SMVMCH, Madagadipet, Puducherry
e-mail: fm.ganeshr@smvmch.ac.in
Tel. +917094604964

Practices of Documentating the Pre-Operative Informed Consent in Obstetrics and Gynaecology in a Tertiary Care Hospital – An Interventional Study

Shreen R.[1], Kagne R.N.[2], Ganesh Rajendiran[3], Jayasree M[4]

[1]Assistant Professor, Department of Forensic Medicine & Toxicology, KIMS, Chennai, [2]Professor, Department of Forensic Medicine & Toxicology, SMVMCH, Puducherry, [3]Assistant Professor, Department of Forensic Medicine & Toxicology, SMVMCH, Puducherry, [4]Professor, Department of Obstetrics and Gynecology, SMVMCH, Puducherry

Abstract

An informed consent form plays a major role both in giving the needed information for the patient and as a legal tool for the doctor to carry out various diagnostic and therapeutic procedures. This paper was an interventional study, conducted in Department of Forensic Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry to audit and improve the current practices of using informed consent forms by the faculties of Department of Obstetrics and Gynecology. The practice of documenting the informed consent forms obtained during the major surgeries of the concerned department was analyzed using a validated check-list. Deficiencies were identified in the documentation and an intervention was carried out to stress on the importance of documentation in the consent forms and the post-interventional consent forms were analyzed against the same validated check-list. The results of both the pre- and post-intervention data on the documentation of consent form were analyzed and compared, which showed a significant improvement in the documentation of the informed consent forms by the faculties of the Obstetrics and Gynecology Department. This study result will emphasis the role of intervention mode used to enhance the documentation of informed consent forms.

Keywords: Informed consent form; Deficiencies; Documentation; Intervention.

Introduction

"Consent connotes agreement, compliance or permission given voluntarily without compulsion.[1] Indian contracts act, section 13 states that "two or more person are said to consent when they agree upon the same thing in the same sense" and section 14 states that "consent is said to be free when it is not caused by coercion, undue influence, fraud, misrepresentation and mistake".[2] Initially, the information given in informed consent forms are complex and difficult for the patient to understand. In the era of 21st century, patients are becoming more aware about this consent form, as the information is available for them at fingerprints through the wide spread access of internet and media.[3] Informed consent in medical practice is based on the decision between the doctor and the patient, where the doctor has to explain and the patient must understand about the details of consent form in the same sense. This can be done by actively involving the patient in decision making process towards the surgery.[4, 5] Failing to do the above process of obtaining informed consent form, the doctor is said to commit an assault and will be liable for the damages caused to the patient as per section 351 IPC.[6] Though there are so much of strict regulations and increasing negligence cases under the consumer protection act because of the improper method of obtaining the informed consent form, still most of

Corresponding Author:
Dr. Ganesh Rajendiran
Assistant Professor, Department of Forensic Medicine & Toxicology, SMVMCH, Madagadipet, Puducherry
e-mail: fm.ganeshr@smvmch.ac.in
Tel. +917094604964

ISSN: 2572-3286

Kumar et al. J Clin Nephrol Ren Care 2020, 6:051
DOI: 10.23937/2572-3286.1510051
Volume 6 | Issue 1
Open Access

Journal of
Clinical Nephrology and Renal Care

ORIGINAL RESEARCH

Renal Equations Using Cystatin C and Creatinine in Correlation to Lipids in Chronic Kidney Disease - A Cross-Sectional Study

P Ravi Kumar, MD[1], Mitali Srivastava, MD[2] and S Asmathulla, MD[3]*

[1]Department of Nephrology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[2]Independent Consultant, Department of Biochemistry, Mehsana, Gujarat, India
[3]Department of Biochemistry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Corresponding author: Dr. P Ravi Kumar, MD, DNB, Department of Nephrology, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry, 605107, India, Tel: 011-91-9952082061

Abstract

Aim: To study and compare the association between estimated GFR with cystatin-C and serum creatinine and the lipid profile in chronic kidney disease.

Background: Chronic kidney disease (CKD) is frequently complicated by the coexistence of cardiovascular (CV) events, making it essential to identify CV risk in CKD. Serum cystatin-C is an upcoming renal biomarker, which is used to measure estimated glomerular filtration rate (eGFR) by the CKD-EPI formula.

Methods: This cross-sectional study, comprising of 120 CKD patients, attempted to determine, which of the two equations for estimating GFR, either by serum cystatin-C or by serum creatinine, is better related with lipid profile which is widely portrayed as a cardiovascular risk factor. The parameters evaluated included lipid profile, serum creatinine and serum cystatin-C among others. Staging was done by both the equations (MDRD equation by creatinine and CKD-EPI equation by cystatin-C) and compared, and both the eGFRs were correlated with the lipid profile.

Results: eGFR estimation by cystatin-C was found to relate inversely and significantly with lipid profile which included-TC, TG, LDL, VLDL ($r = -0.19, -0.23, -0.18, -0.23$; $p < 0.05$ respectively) and lipid ratios TC/HDL, LDL/HDL ($r = -0.26, -0.24$; $p < 0.01$ respectively). Lipid profile except HDL was found to correlate negatively and significantly with eGFR estimation by serum cystatin-C ($p < 0.05$). Lipid ratios- TC/HDL and LDL/HDL were also found to correlate inversely and significantly ($p < 0.01$). However, eGFR using serum creatinine failed to offer a similar significant relation.

Conclusion: Serum cystatin-C based eGFR was found to be better correlated with the lipid profile, when compared with eGFR estimation using serum creatinine. Hence, the correlation between cystatin-C based eGFR and lipids might indicate that this eGFR methodology may be a better marker of cardiovascular risk as lipids are a well known traditional risk factor for cardiovascular disease.

Keywords

Cystatin C, Renal insufficiency, Estimated glomerular filtration rate, MDRD equation, CKD-EPI equation, Cardio-renal disease, Cardiovascular risk, Lipid profile

Introduction

Chronic kidney disease (CKD) is a world-wide health problem whose burden continues to increase. CKD encompasses a spectrum of different pathophysiologic processes, associated with abnormal kidney function and a progressive decline in glomerular filtration rate (GFR). The National Kidney Foundation had provided a classification for chronic kidney diseases, which has since evolved through time. This staging of chronic kidney disease, as delineated by the Kidney Dialysis Outcomes Quality Initiative (KDOQI), depends on the estimated glomerular filtration rate (eGFR) [1].

CKD is defined using eGFR as the presence of evidence of kidney damage with an abnormal GFR for at least 3 months or by a GFR below 60 ml/min/1.73 m^2, body surface area [2]. Serum creatinine is the most commonly used marker for eGFR using the Cockcroft-Gault formula or the MDRD (Modification of Diet in Renal Disease) [3]. However, creatinine is an unstable entity and has wide variance. Even though it is still most

Citation: Kumar PR, Srivastava M, Asmathulla S (2020) Renal Equations Using Cystatin C and Creatinine in Correlation to Lipids in Chronic Kidney Disease - A Cross-Sectional Study. J Clin Nephrol Ren Care 6:051. doi.org/10.23937/2572-3286.1510051

Accepted: April 13, 2020: Published: April 15, 2020

Indian Journal of Medical Case Reports ISSN: 2319–3832(Online)
An Open Access, Online International Journal Available at http://www.cibtech.org/jcr.htm
2020 Vol 9 (2) July-December, pp. 31-34/Jayanthi
Case Report

BILATERAL AXILLARY ACCESSORY BREAST TISSUE IN A MALE- A CASE REPORT

Jayanthi C*
Department of Pathology, Sri Manakula vinayagar Medical College and Hospital, Villupuram dt, Tamil Nadu, India-605108
**Author for Correspondence: drjayanthichandran@gmail.com*

ABSTRACT
Accessory breast tissue (ABT) is more frequent in females compared to male counterparts, commonest presentation being unilateral axillary mass. Presence of bilateral accessory breast tissue in male is a rare occurrence and it is noteworthy due to its need for close follow-ups. We report a case of bilateral axillary accessory breast in a 25 year old male with no other complaints. The importance of fine needle aspirate as diagnostic tool in an unsuspected case of ectopic breast tissue without nipple aerola is emphasised here.

Keywords: *Accessory Breast Tissue, Axilla, Fine Needle Aspiration*

INTRODUCTION
Accessory breast tissue (ABT) is the presence of a nipple, areola or glandular tissue in addition to the normal pair of breasts (Guray and Sahin, 2006). It is metonym with polymastia, supernumerary or ectopic breast tissue. ABT is more frequently seen along the milk line, axilla being the commonest location. However, an anatomic location outside the milk line should not preclude a diagnosis of ectopic breast tissue, as there are many well-documented, unusual sites of such tissue, including the knee, lateral thigh, buttock, face, ear, and neck (Guray, Sahin, 2006). It may occur unilaterally or bilaterally. It incidence in female (0.4-6%) seems to outnumber its male counterpart (1-3%) (Sahu *et al.*, 2007). There is a drift in the occurence of ABT among the Asian population especially Japanese than Caucasian (Neki *et al.*, 2014). The components of ABT may include nipple, areola, and/ or glandular tissue. When nipple-areolar complex is absent, the presence of ABT is difficult to identify. Its development is hormone dependent, similar to normal breast tissue. The functionality of ABT determines its response to physiological hormonal stimulus. Ectopic breast tissue usually arises sporadically; however, a hereditary predisposition has also been reported (Nirmala *et al.*, 2010).

CASE
A 25-year-old male presented to surgery out patient department of GTB hospital with history of bilateral axillary swellings for past 5 months. Swelling was gradually increasing in size and was associated with mild pain. A clinical diagnosis of bilateral axillary lymphadenopathy was offered. Examination of both axillary regions revealed a mildly tender, soft and mobile swelling measuring 1.5 X 1.5cms and 2 X 2cms on left and right sides respectively. The swelling was placed in the subcutaneous plane. Fine needle aspiration was attempted from both sides using 23 gauge needle attached to 10 ml syringe. FNA from left side yielded fluid mixed aspirate with few fragments of tissue, while from right side it was predominantly blood mixed aspirate. Two air dried May Grunwald Giemsa (MGG) stained and 1 alcohol fixed papaniculou stained smears were made from both sides.
Fine needle aspirate from both left and right axillary swellings were cellular with uniform monolayered sheets of benign ductal epithelial cells along with few darkly staining myoepithelial cells in a fluid background (Fig 1, 2). Cytomorphological features were consistent with benign breast tissue in accessory location. Since the swelling was recent in onset (past two months only) gynecomastia was suspected and the patient was reexamined. However his bilateral breasts were not enlarged. They were normal looking with no other complaints. To find out cause of gynecomastia in accessory breast a detailed history and clinical examination was done. He was not taking any drugs that could induce gynecomastia. The patient

IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 19, Issue 11 Ser.9 (November. 2020), PP 18-22
www.iosrjournals.org

"Identification of modifiable risk factors in young type 2 diabetes mellitus – a rural hospital based study"

Praveen kumarP[1], Girija S[2]

1 Post graduate, Department of General Medicine, Sri ManakulaVinayagar Medical College and Hospital, Puducherry, India

2 Professor, Department of General Medicine, Sri ManakulaVinayagar Medical College and Hospital, Puducherry, India

Abstract:

Background:
we aimed to study the sociodemographic profile of young type 2 diabetes mellitus patients of age between 20 to 32 years and to identify the modifiable risk factors contributing to young type 2 diabetes mellitus patients.

Method::
It was a cross sectional study done in a tertiary care centre in rural puducherry,India for a period of six months from july 2019 to December 2019. Socio demographic data, family history, level of physical activity (using International physical activity questionnaire IPAQ), addictions were collected using a structured questionnaire. Details of anthropometry, blood pressure and glycemic status were collected with help of appropriate instruments. Data were analysed using SPSS version 21.

Results:
A total of 22 type 2 diabetes mellitus patients belonging to age group between 24 to 31 years were included. Higher proportion of patients followed a sedentary lifestyle or no physical activities i.e., 17 (77.3%). Mean Body mass index (BMI) of the study participants were 25.72 ± 2.29. Of which 7 (31.8%) patients were belonging to overweight BMI category and 13 (59.1%) patients to obese BMI category. Mean systolic blood pressure was 112.5 ± 7.2 mmHg. Association between physical activities and body mass index was statistically significant (P value 0.006). All patients had multiple modifiable risk factors.

Conclusion:
It was observed that multiple modifiable risk factors occurred in young diabetic patients. Of which physical inactivity and obesity played a major role. Hence aggressive intervention strategies (primordial and primary prevention) are required at community levels to control the diabetes epidemic in rural India particularly among young patients.

Date of Submission: 09-11-2020 Date of Acceptance: 23-11-2020

I. Introduction

India has been designated as "diabetes capital" of the world, and 10-16% of urban population and 5-8% of rural population in India alone are affected by diabetes mellitus.[1]The causation of diabetes mellitus involves multiple factors containing both non-modifiable factors like age, genetic defects, family history and modifiable factors like diet, obesity, sedentary lifestyle, socioeconomic status, stress, alcohol, viral infections etc.

Type 2 diabetes mellitus, earlier considered a disorder of middle age or elderly, is increasingly being reported among young adults and adolescence.[2] Diabetes mellitus screening for children and adolescents is not recommended and hence adequate data and estimated young population affected by type 2 diabetes mellitus are lacking. The ICMR-INDIAB study also showed that there is a shift of type 2 diabetes mellitus to younger age groups and diabetes are occurring at the ages 25–34 years in India.[3] They have a risk of developing early microvascular and macrovascular complications early affecting their productive years of life.

The present study aims to identify the modifiable risk factors in young individuals of this region and if identified early remedial measures can be implemented at community level aggressively, thus preventing or delaying the onset of type of diabetes mellitus.

The data which obtained in this study can be used to do further research in the future.

II. Materials and Method::

This study was a cross sectional study done at Sri ManakulaVinayagar medical college and hospital, which is a tertiary care hospital located in rural Puducherry, for a period of six months from July 2019 to December 2019. Patients with type 2 diabetes mellitus visiting medical outpatient department were recruited for

Determinants of Obesity among Rural Adults in South India – A Cross Sectional Study

Rajalakshmi M.[1], Amol R. Dongre[2]

[1, 2] Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.

ABSTRACT

BACKGROUND

Obesity is characterized by abnormal or excessive fat accumulation and is one of the major health concerns affecting young children, adolescents, and adults, the world over. The main predisposing factors for many non-communicable diseases are overweight and obesity which has high mortality than underweight. Hence, we aimed to study the determinants of obesity.

METHODS

A cross-sectional study was undertaken among the representative sample of 590 adults in 50 villages of Villupuram district, Tamilnadu. Data was collected by house-to-house survey. Data collection was done using WHO Step questionnaire step-1 and step-2. Analysis was done using SPSS 24 software package.

RESULTS

The overall prevalence of overweight and obesity was 18.3 % and 33.6 % respectively. Female gender, less physical activity and less consumption of vegetables and fruits were identified as significant risk factors for obesity.

CONCLUSIONS

More than half (52 %) of adults have overweight or obesity, and some of the factors identified as determinants are preventable. Hence, primordial preventive measures should be applied for reducing BMI in early phase of life especially school going children.

KEYWORDS

Community, Determinants, Overweight, Obesity, Rural

Corresponding Author:
Dr. Rajalakshmi M.,
No. 2, 4th Cross Street,
Sri Mookambigai Nagar,
Reddiyarpalayam,
Puducherry-605010, India.
E-mail: drrajalakshmimahe@gmail.com

DOI: 10.18410/jebmh/2020/540

How to Cite This Article:
Rajalakshmi M, Dongre AR. Determinants of obesity among rural adults in South India – a cross sectional study. J Evid Based Med Healthc 2020; 7(45), 2621-2625. DOI: 10.18410/jebmh/2020/540

Submission 10-09-2020,
Peer Review 20-09-2020,
Acceptance 28-09-2020,
Published 09-11-2020.

Online Journal of Health and Allied Sciences
Peer Reviewed, Open Access, Free Online Journal
Published Quarterly : Mangalore, South India : ISSN 0972-5997
Volume 19, Issue 2; Apr-Jun 2020

Original Article:

Lost to Follow – Up During Diagnosis (LTFU) of Tuberculosis Patients: A Mixed Method Study on Determinant's and Potential Solutions.

Authors:
Roman Mohan, Post Graduate, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry,
Kalaiselvan Ganapathy, FAIMER fellow, Professor, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry,
Venugopal Vinayagamoorthy, FAIMER fellow, Associate Professor, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry.

Address for Correspondence
Dr. Kalaiselvan Ganapathy , Professor, Department of Community Medicine,
Sri Manakula Vinayagar Medical College and Hospital, Puducherry
E-mail: kalaiselvanmd@gmail.com.

Citation
Mohan R, Ganapathy K, Vinayagamoorthy V. Lost to Follow – Up During Diagnosis (LTFU) of Tuberculosis Patients: A Mixed Method Study on Determinant's and Potential Solutions. *Online J Health Allied Scs.* 2020;19(2):6. Available at URL: https://www.ojhas.org/issue74/2020-2-6.html

Submitted: Jun 27, 2020; Accepted: Sep 7, 2020; Published: Sep 20, 2020

Abstract: Background: Loss to follow up of tuberculosis patient during diagnosis is an important barrier to achieve elimination of TB by 2025 in India. This study estimated the burden and trend of loss to follow up of TB patient during diagnosis, explored tuberculosis patient's perspective for becoming Loss To Follow Up during diagnostic period (LTFU) and stakeholders' initiatives and suggested solutions for the same. Methods: Mixed Method study was used - Quantitative (Record based cohort study) and Qualitative (In – depth interview with LTFU patients on their challenges faced and barriers for not giving 2nd sputum sample and free list with stakeholders). Data were extracted from RNTCP Laboratory Register for the cohort of patients registered between January 2014 and December 2018 in a DMC of tertiary care teaching hospital. Qualitative interviews were carried out using interview guide. Results: Of the total 1678 positive cases, 90 (5.3%) were LTFU. On adjusted analysis distance >75km from medical college (Relative risk 2.3; 95%CI: 1.2-4.3) and year of diagnosis were identified as significant risk factors. In Manual content analysis showed five categories of challenges faced by LTFU cases namely 1) lack of awareness; 2) addictions; 3) stigma; 4) Employment related barriers and 5) perception on drug side effects. Free listing conducted between staffs of hospital and from stakeholders the main suggested solutions identified were 1) context-based counselling; 2) friendly patient tracking; and 3) proactive in-service. Conclusion: There was significantly decreasing trend in LTFU patients over the years (in 2014 – 6% to 0.5% in 2018). Co-ordinated context-specific pro-active interventions are required to achieve End TB strategy of the nation.

Key Words: LTFU, Mixed methods research, Suggested solutions, Stakeholder's perspective

Introduction:
Tuberculosis (TB) has existed for millennia and remains a major global health problem.[1] India with the largest number of patients with tuberculosis, runs the largest TB control program in the world. TB patients who are lost to follow-up before starting therapy are infectious and have high mortality rates and can spread infection to other people in the community. Loss to follow up (LTFU) can occur at multiple stages of care pathway, those includes patient who received a diagnosis of tuberculosis on the basis of only one positive sputum smear drop out of care during diagnostic process, who fail to provide second sample (lost to follow-up during diagnostic period or diagnostic default)[2] and before initiating tuberculosis treatment are defined as Pre – treatment loss to follow up, formerly known as initial defaulter.[2,3] which is a barrier to tuberculosis (TB) control in India's Revised National TB Control Programme (RNTCP). People with active TB can infect 10–15 other people through close contact over the course of a year (WHO).[4] LTFU should be one of the primary concerns in the battle against TB. In India, RNTCP's annual report suggests that more than 135,000 (14.6%) smear-positive patients were lost to follow-up prior to starting on TB treatment (PTLFU) in 2013.[5] World Health Organization (WHO) estimates that India has nearly one million "missing" TB patients, these "missing" patients are either undiagnosed or are diagnosed but not reported. We should prioritize finding these patients and linking them to effective treatment.[6,7]
The Medical College's involvement and contribution in RNTCP through task force mechanism is well appreciated and highly helpful. The unique problem of Pondicherry is that the majority of patients utilizing the services of medical colleges are from the border districts of Tamil Nadu. Most of these patients after receiving the results from the laboratory fail to report to the DOTS centre for referral slip and contribute to burden of Initial defaulters. As these patients are from border district the mechanism to track these patients was difficult. Hence, the present study aims to find out the various factors that influences the Loss to Follow Up during Diagnostic period among TB patients under DOTS in RNTCP. Further, help us to take corrective measures to prevent the patient from initial defaulting. With this backdrop this study was taken up to

Online Journal of Health and Allied Sciences
Peer Reviewed, Open Access, Free Online Journal
Published Quarterly : Mangalore, South India : ISSN 0972-9997
Volume 19, Issue 3, Jul-Sep 2020

Case Report:

Cystic Primary Ovarian Malignant Mixed Mullerian Tumour

Authors:
Jayanthi C, Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital
Priyadarshini Deburi, Assistant Professor, Department of Pathology, Sri Venkateswara Medical College and Research Centre
Giridhar CM, Assistant Professor, Department of Surgical Oncology, Sri Venkateswara Medical College and Research Centre

Address for Correspondence
Dr. Jayanthi C,
Associate Professor, Department of Pathology,
Sri Manakula vinayagar Medical College and Hospital,
Madagadipet
Puducherry
India
E-mail: drjayanthichandran@gmail.com.

Citation
Jayanthi C, Deburi P, Giridhar CM. Cystic Primary Ovarian Malignant Mixed Mullerian Tumour. *Online J Health Allied Scs.* 2020;19(3):11. Available at URL: http://www.ojhas.org/issue75/2020-3-11.html

Submitted: Jul 20, 2020; Accepted: Nov 20, 2020; Published: Dec 20, 2020

Abstract: Primary carcinosarcoma of the ovary is a rare, challenging malignancy of the female genital tract. Preoperative diagnosis of this tumor is seldom made as it mimics epithelial ovarian tumors. We report a case of 45 years multiparous lady who underwent staging laparotomy to disclose smooth surface left ovarian cystic mass with minimal solid areas. Histopathologically a biphasic tumor with malignant epithelial and mesenchymal component was seen. Explicit diagnosis of primary ovarian carcinosarcoma was established using immunohistochemical marker study. Primary mixed Mullerian tumor of the ovary has to be considered in the differential diagnosis of predominantly cystic ovarian lesion with minimal solid areas. Regular followup and close monitoring of the patient is required to understand the behavior of this exceptional tumor.
Key Words: Carcinosarcoma, Cystic mass, Staging laparotomy

Introduction:

Primary malignant mixed Mullerian neoplasm of ovary incessantly known as carcinosarcoma is an aggressive tumor with dismal prognosis. This infrequent tumor usually involves the uterine corpus but its incidence outside the genital tract has also been reported(1).The accounted frequency of ovarian carcinosarcoma is around 1-3%(2). Risk factors of ovarian carcinosarcoma (OCS) are obesity, nulliparity, estrogen exposure and long term tamoxifen use. Most of the OCS reported so far is common in the postmenopausal women(3). Histologically they are biphasic tumor with varying proportions of distinct malignant epithelial and stromal component. Majority of OCS are solid tumor with varying proportions of cystic spaces. Herein we report a case of ovarian carcinosarcoma presenting as a predominantly cystic lesion with minimal solid component.

Case Report

A 45 year old multiparous female presented to the gynecology outpatient department of Sri Venkateswara Medical College and Research Centre with history of recurrent abdominal pain, dysuria, weight loss and loss of appetite for the past two weeks. She had three live children with no history of abortion and her last child birth was 20 years back. She had a past history of simple hysterectomy with right salpingo oophorectomy seven years back for complaints of profuse bleeding per vagina. Histopathologically, uterus was reported to show anterior wall leiomyoma with no other significant pathology. The patient was symptomless thereafter till she presented here. On examination a mobile mass was felt through fornix per vaginally. Abdominal and pelvic contrast enhanced computed tomography showed a 12.1x8.1x10.5 cm predominantly cystic lesion with thin septa (3 mm) with few minimally enhancing solid components possibly arising from left ovary. [Fig 1] An explorative laparotomy was planned and the patient underwent left salpingo-oophorectomy along with infracolicomentiactomy, para-aortic lymph node dissection and peritoneal washing with biopsy. Intraoperatively a 13x10cm left complex ovarian cyst with no surface deposits was identified. The cyst was grossly adherent to the vaginal vault and bladder.

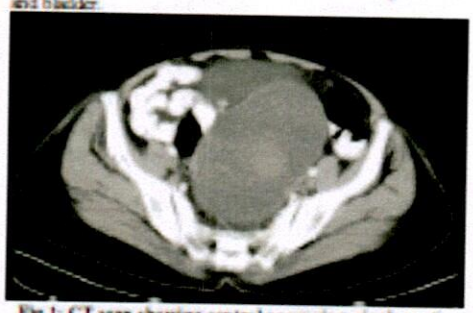


Fig 1: CT scan showing central occupying, single cystic and solid enhancing component tumor with smooth contour. The tumor is closely associated with the left pelvic side wall and abuts the left external iliac vein and artery.

International Journal Dental and Medical Sciences Research
Volume 2, Issue 3, pp: 23-27 www.ijdmsrjournal.com ISSN: 2582-6018

Recurrent Inguinal Hernia – A Study of Risk Factors

Babu S[1], Abdul Maliq M[2], Ravishankar J[3],
1. Former Associate Professor,
2. Assistant Professor (Corresponding Author)
3. Associate Professor. – Department of General Surgery, Government Sivagangai Medical College Hospital, Sivagangai, Tamilnadu

Date of Submission: 08-08-2020 Date of Acceptance: 24-08-2020

ABSTRACT: Aim: A recurrent inguinal hernia occurs due to a weakening in the groin muscle, which recurs even after surgical intervention. Inguinal hernias can occur in both men and women, and become more complex when they are recurring. Though with utmost care surgical repair of inguinal hernias are being done, recurrences in inguinal hernia is not so rare. There are multiple factors that do have a role in recurrences of inguinal hernia. In this study, we report the cases operated for recurrent inguinal hernia in our center and analyze the patient related risk factors for recurrent inguinal hernia.

Methods: Study of the case records of 90 patients operated between November 2013 and July 2019, who were operated for recurrent inguinal hernia at a tertiary care centre were reviewed retrospectively. The cause for recurrence such as Chronic cough (seen in chronic bronchitis/ bronchial asthma), micturation difficulty (seen in stricture urethra/ prostatic hypertrophy) chronic constipation and lifting heavy weight (Manual labourers), morbid obesity were enquired and recorded.

Results: All of our patients were males. The mean age was 54.97 years. The mean time to recurrence was 5.5 years. During the previous surgery polypropelene mesh had been used in 12 patients (13.33%), Tissue repair done in 78 cases (86.66%). The cause for recurrence in 43 cases (47.77%) could be detected whereas in 47 cases (52.22%) definite cause could not be detected. Age above 40years is also a remarkable factor in recurrence of inguinal hernia whereas use of surgical mesh in repair of hernia reduces the recurrence rate.

KEYWORDS: Inguinal hernia, Recurrence, Risk factors, Recurrent inguinal hernia.

I. INTRODUCTION

Hernia occurs mostly in the inguinal region. Hernia repair is the most common surgery done by a general surgeon. Complications of a hernia surgery includes recurrences, bleeding in surgical field, infections, seromas, chronic pain in groin region, pain-related sexual dysfunction, and ejaculatory disorders. In the literature, operation for recurrent hernias has been reported to have a higher risk for possible complications than primary hernia surgery. Although the definite causes of recurrence after surgery still remains unclear, controllable technical risk factors such as surgical methods, anesthesia techniques, mesh-fixation techniques, surgeon experience and hospital volume have been described as the main risk factors for recurrent inguinal hernia. Patient related factors such as chronic cough, micturation difficulties, chronic constipation, continuous weight lifting, obesity also contribute for the recurrence significantly. In addition, uncontrollable patient-related risk factors including sex, hernia anatomy, hernia type and postoperative recovery have been shown to affect the risk of recurrence following inguinal hernia surgery in varying degrees [1]. In the present study, we try to detect the cause of recurrence of inguinal hernia in the cases of recurrent inguinal hernia present in our center and discuss the risk factors for recurrent inguinal hernia. This study mainly focuses on the non-technical risk factors for recurrent inguinal hernia.

II. MATERIALS AND METHODS

Selection of Patients.

This study included a total of 90 patients who were operated due to recurrent inguinal hernia at a Medical college hospital, (tertiary care center) between November 2013 and July 2019. Medical records of all patients were retrospectively analyzed. Patients with primary inguinal hernia, patients younger than 14 years of age, and those with abdominal hernia (i.e., umbilical, epigastric, or incisional) outside the inguinal region, the patients treated with emergency surgery were excluded from the study. Data including demographic characteristics of the patients, time from previous surgery, localization and type of hernia, and the use of surgical meshes in previous surgery were recorded. In all the records, patients

International Journal of Contemporary Pediatrics
Boopathy S et al. Int J Contemp Pediatr. 2020 May;7(5):1177-1180
http://www.ijpediatrics.com
pISSN 2349-3283 | eISSN 2349-3291

Case Report

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20201666

Atypical arthritis in a toddler: beware, save the heart

Sharani Boopathy*, Kanimozhi Thandapani, Arulkumaran Arunagirinathan

Department of Pediatrics, Sri ManakulaVinayagar Medical College and Hospital, Puducherry, India

Received: 08 March 2020
Accepted: 01 April 2020

***Correspondence:**
Dr. Sharani Boopathy,
E-mail: sharanboopathy@gmail.com

ABSTRACT

Acute rheumatic fever still poses a dreadful threat to pediatric morbidity and mortality. A 2 year old toddler presented to us with non migratory polyarticular joint pain and swelling. General physical and systemic examination was normal. Local examination revealed swelling and tenderness of multiple small and large joints. Further evaluation fulfilled Modified Jones criteria and she was diagnosed to have acute rheumatic fever. Other close differentials were simultaneously ruled out. Child was started on naproxen because of aspirin toxicity. There was significant response for therapy and complete resolution of joint involvement was noted on follow up. We report this case to emphasize the fact that rheumatic fever might have bizarre clinical presentation and may also affect infants and toddlers deviating the typical age of onset. There is a need for earliest possible initiation of adequate management and follow up to prevent permanent cardiac complications. This warrants high index of suspicion even in uncommon age group.

Keywords: Atypical arthritis, Children, Rheumatic fever

INTRODUCTION

Acute rheumatic fever is an autoimmune, multiorgan inflammatory disease that occurs as a result of Group A β-hemolytic streptococcal pharyngitis.[1] About 0.3 - 3% of those who had GAS infection develop acute rheumatic fever, based on genetic predisposition and virulence of the infecting strain.[2] Common primary sites of affliction include heart, joints and central nervous system, of which most important sequel of rheumatic fever is the rheumatic heart disease (RHD) because of its significant residual morbidity and mortality.[3]

Rheumatic fever in children younger than 5 years is extremely uncommon and had widely varied presentations compared to older children. Younger ones were noted to acquire more severe carditis often associated with congestive cardiac failure and those who were followed up had high frequency of recurrence unlike school going children.[4,5] Miserably its heterogeneous presentation in preschool children provides a greater difficulty in suspicion leading to under diagnosis and progression to rheumatic heart disease , which is preventable. Here we report a 2 year old female toddler who had initial attack of acute rheumatic fever with isolated atypical articular manifestation.

CASE REPORT

A 2 year old female toddler hailing from Villupuram, Tamil Nadu was hospitalized with complaints of fever on and off for one week, multiple joint pain and swelling for 4 days with difficulty in ambulation for 1 day. Initially she developed left ankle swelling and pain, followed by left knee, with subsequent additive involvement of right ankle and right knee (Figure 1). Eventually involvement of all metacarpophalangeal joints of both hands, all metatarsophalangeal joints of both feet with proximal and distal interphalangeal joints of all four limbs was also noted (Figure 2).

Review Article

For the love of color: Plant colors and the dermatologist

Hima Gopinath, Kaliaperumal Karthikeyan[1], Valeti Meghana[2]

Department of Dermatology, All India Institute of Medical Sciences, Mangalagiri, Andhra Pradesh, [1]Department of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry University, Puducherry, India

Correspondence:
Dr. Hima Gopinath,
Department of Dermatology,
All India Institute of Medical Sciences, Mangalagiri - 522 503,
Guntur District, Andhra Pradesh,
India.
E-mail: hima36@gmail.com

Abstract

Humans have been anointing their skin with natural colorants since antiquity. Before the advent of modern cosmetics, tattoos and hair dyes, the spectacular colors in plants served as a palette for humanity's fascination with color. Skin, hair, nails, teeth and clothing have been altered with botanical colorants for centuries. Understanding the relevance of botanical colorants is an important part of cultural competency. Substitution or adulteration of plant colorants with synthetic colorants has played a role in varied dermatoses (eg. black henna, kumkum, and Holi dermatoses). Safety concerns over synthetic colorants have led to a resurgence of natural colorants. However, some plant colorants have produced adverse reactions. Plant colorants have also played an integral role in medicine. Ingested plant colorants are an indispensable part of our diet, playing crucial roles in the maintenance of health and prevention of disease. Excessive intake of some pigments can alter skin color (carotenoderma, lycopenemia, and the golden tan of canthaxanthin). We have relied on the colors of hematoxylin and alizarin red, derived from the logwood tree and madder roots, respectively, to study and diagnose disease in pathology. We briefly review the uses, cultural relevance, and adverse effects of the common botanical colorants on the skin, hair, and mucosa. We also describe their relevance in our diet, and in the diagnosis and description of dermatological diseases.

Key words: Beta carotene, cosmetic, lycopene, plant extract, tattoo

Introduction

From palaeolithic times, humans have enriched their appearance with various body paints derived from nature.[1] Plants, minerals and insects have been used to color skin, hair, nails, and clothing for aesthetic, ceremonial, military and religious reasons.[2] The major botanical colorant groups such as chlorophylls, carotenoids, flavonoids, and betalains, along with several other minor colorant groups, provide an endless array of colors that has inspired art and intrigued medicine.[3] We briefly review the decorative, dietary, diagnostic and descriptive aspects of botanical colorants in dermatology.

Access this article online	
Quick Response Code:	Website: www.ijdvl.com
	DOI: 10.4103/ijdvl.IJDVL_402_19

Henna

Henna is obtained from the plant *Lawsonia inermis* [Figure 1], an ancient medicinal shrub. It has been used by Egyptians as seen in the mummies to color hair and nails, and in the Orient to color skin, hair and nails. It was brought to India in the 12th century by the Mughals from Persia. It is traditionally used to color hands and feet (Mehndi) before weddings and other celebrations.[4] Muslims and Orthodox Jews have used it to color natural textiles. Surgeons in India have used it as a pre-operative

How to cite this article: Gopinath H, Karthikeyan K, Meghana V. For the love of color: Plant colors and the dermatologist. Indian J Dermatol Venereol Leprol 2020;86:622-9.

Received: May, 2019. Accepted: April, 2020.

1. Pediatr Dermatol. 2020 Nov;37(6):1068-1072. doi: 10.1111/pde.14359. Epub 2020 Sep 14.

Traditional threads tied on children in india trigger dermatitis and may contain carcinogens.

Vijayasankar P(1), Gopinath H(2), Karthikeyan K(1).

Author information:
(1)Department of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India.
(2)Department of Dermatology, All India Institute of Medical Sciences, Mangalagiri, India.

BACKGROUND/OBJECTIVES: It is a common Indian custom to tie threads on the hip, neck, or wrist of infants and children.
METHODS/RESULTS: A retrospective registry review was performed for 23 children (age range 5-18 months) with threads tied around the hip/neck/forearm who presented with dermatitis. Analysis of one of the threads revealed the presence of three banned azo dyes and disperse yellow 3 (category 2B possible carcinogens).
CONCLUSION: Thread dermatitis is a unique cultural dermatosis. Dermatitis caused by threads may have multifactorial causes including friction, maceration, and contact dermatitis (allergic and/ or irritant) to the thread contents. Use of banned dyes still used to color these threads may be contributory to dermatitis, but there is also concern for health and environmental hazards to children. Strict regulation is needed in the manufacture of these threads to protect the health and welfare of young children.

DOI: 10.1111/pde.14359
PMID: 32926476 [Indexed for MEDLINE]

'Learning from home': role of e-learning methodologies and tools during novel coronavirus pandemic outbreak

Velusami Deepika [1,2] Krishnamurthy Soundariya,[1,2] Kaliaperumal Karthikeyan,[2,3] Ganapathy Kalaiselvan[2,4]

[1]Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[2]Medical Education Unit, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[3]Department of of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[4]Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Correspondence to
Dr Velusami Deepika, Associate Professor, Department of Physiology, Medical Education Unit, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Pondicherry 605 107, India; deepy843@gmail.com

Received 27 April 2020
Revised 20 July 2020
Accepted 24 September 2020
Published Online First 5 November 2020

To cite: Deepika V, Soundariya K, Karthikeyan K, *et al*. *Postgrad Med J* 2021;97:590–597.

ABSTRACT

Background

During the crucial time of coronavirus pandemic, education is being remodelled: opening the doors of electronic learning (e-learning). The review emphasises on the various e-learning methods that can be used in the current scenario.

Methods

The review was based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines on databases, namely, PubMed, Google Scholar and Cochrane. Out of 1524 identified articles, after the process of screening and based on the eligibility criteria, 45 full-text articles were reviewed.

Results

Though there are many caveats on the path of successful implementation this is the right time that we step towards e-learning. The article discusses the methods and tools in e-learning that can modify the traditional ways of content delivery, record maintenance, assessment and feedback.

Conclusion

During the period of 'planet arrest', when the whole world is locked down with the motive of social distancing, let us stay connected with e-learning.

INTRODUCTION

Novel coronavirus pandemic outbreak in 2020 is a world-shattering event affecting all domains of lives.[1] In order to curtail the spread, lockdown across the globe is being implemented. With the closure of educational institutions, the students face doldrums in their academic activities. In these trying times, technology comes to the fore, transforming teaching and learning into a novel experience.

Electronic (e)-learning is the most convenient tool that is being used reliably transcending geographical frontiers and time zones. E-learning is defined as any educational intervention that is mediated electronically via the internet.[2]

Education technology firms are going to be uplifted in the wake of the coronavirus outbreak. Organisations and institutions are at present keenly interested in offering blended mode of learning to facilitate better education and for accreditation purposes.[3] Moreover, e-learning is befitting to the colleges with greater annual intake of undergraduates, owing to its capability to address large group learners at a single point. It is high time that medical teachers learn and orient themselves in the realm of e-learning. The process of e-learning enhances self-motivation of the current smart generation and offer learners control over content, learning sequence, allows the learner to work at their own pace, provides opportunity to build on their previous experience and offers a problem-centric learning environment. Thus, e-learning offers increased learner autonomy and self-direction, thus fulfilling the adult learning principles.[4]

Taking all these facts into consideration, probably, Information Communication Technology (ICT) will facilitate to temporarily fill the present gap in education, by enhancing the learner's knowledge, keep automated records of individual student activities, evaluate them and track their academic performance for a specified period of time.

With this perspective in mind, the current review aimed to explore the available e-learning modalities that can be employed to foster medical education. This review may serve as a resource material to a beginner and an update to regular users of e-learning.

METHODS

We followed Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and recommendations as depicted in the PRISMA flow diagram[5] (figure 1).

We searched PubMed, Google Scholar and Cochrane from the year 2000 to March 2020 for all published articles on e-learning in education.

Search strategy

The search was conducted using the following, Medical Search Headings (MeSH) terms and keywords, namely, 'Online learning', 'Medical education', 'E-learning', employing Boolean operators like AND, OR.

Inclusion criteria

All original and review articles fulfilling the following eligibility criteria were included in the study: (i) e-learning methods and tools enabling the teaching learning process and (ii) articles published in peer review journals in English from 2000 until March 2020.

Exclusion criteria

Articles were excluded, if they belong to any one of the following categories: (i) commentaries, case studies, case series, letters, thesis, dissertations, reports,

Brief Report

Face and Neck Pigmentary Alterations in Hair Dye Users: A Cross-sectional Study from South India

Abstract

Background: Hair dyes are commonly used for the concealment of grey hair in India. The pigmentary alterations produced by hair dyes on the face and neck have not received sufficient attention. **Aims:** To study the pigmentary alterations on the face and neck in hair dye users, and identify possible risk factors associated with the face and neck hyperpigmentation. **Methods:** A hospital-based descriptive cross-sectional study was done on consecutive hair dye users. A detailed history was taken, and a clinical examination was done to record the pigmentary alterations. The patterns, areas affected, the intensity of hyperpigmentation, percentage of the area involved and risk factors were noted. **Results:** One hundred and twenty patients were included in the study. Around 118 (98.3%) patients had hyperpigmentation over face and/or neck. 16 (13.3%) barely perceivable, 40 (33.3%) mild, 44 (36.7%) moderate, and 18 (15%) severe pigmentation. The lateral forehead (106, 88.3%), the helix of the ear (106, 88.3%), central forehead (97, 80.8%), and zygomatic area (92, 76.7%) were the most frequently affected areas in our study. Fourteen patients (11.7%) had depigmented macules on the scalp and/or lips. **Conclusion:** Pigmentary alterations, particularly hyperpigmentation over the upper face and ears are common with the use of hair dyes. The skin type may play a role in the intensity of hyperpigmentation.

Keywords: *Contact dermatitis, hair dye, melanosis*

Valeti Meghana, Hima Gopinath, Kaliaperumal Karthikeyan, Vinayagamoorthy Venugopal[1]

Department of Dermatology, Venereology and Leprosy and [1]Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry University, Madagadipet, Pondicherry, India

Introduction

The face and neck are commonly affected in several diverse acquired pigmentary disorders such as melasma, photoallergic and phototoxic drug reactions, lichen planus pigmentosus, pigmented contact dermatitis, post-inflammatory hyperpigmentation, ashy dermatosis, erthromelanosis follicularis faciei et colli, erythrose peribuccale of Brocq, ephelides, maturational dyschromia, acanthosis nigricans, and exogenous ochronosis.[1,2] Hair dyes have been implicated in some reports of facial pigmented contact dermatitis, lichen planus pigmentosus, acquired dermal macular hyperpigmentation, and depigmentation.[3-5] However, there is a paucity of studies on the pigmentary alterations on the face and neck in hair dye users. Hence our objective was to study the pigmentary alterations on the face and neck in hair dye users and identify possible risk factors associated with the face and neck hyperpigmentation.

Methods

Setting

A hospital-based descriptive cross-sectional study was done in the department of dermatology of a tertiary care institute located in south India. The study was done for a period of 1 year from November 2017 to October 2018.

Study participants

Consecutive consenting semi-permanent/permanent hair dye users of both genders, and above 18 years of age, attending the dermatology outpatient department were included in the study. Patients with other congenital or acquired causes of face and neck pigmentary alterations, including the use of cosmetics, fairness creams, leave on shampoos, hair oils other than coconut oil, herbal agents such as turmeric and topical or systemic drugs, or systemic conditions known to be associated with pigmentary alterations were excluded from the study. Patients with depigmentation were included only if the depigmentation started after

Address for correspondence:
Dr. Hima Gopinath, Department of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet - 605 107, Pondicherry, India.
E-mail: hima56@gmail.com

How to cite this article: Meghana V, Gopinath H, Karthikeyan K, Venugopal V. Face and neck pigmentary alterations in hair dye users: A cross-sectional study from south India. Indian Dermatol Online J 2020;11:780-5.

Received: 25-Jun-2019. **Revised:** 28-Nov-2019. **Accepted:** 19-Dec-2019. **Published:** 19-Sep-2020.

Access this article online

Website: www.idoj.in

DOI: 10.4103/idoj.IDOJ_313_19

Quick Response Code:

ISSN- O: 2458 - 868X, ISSN–P: 2458 – 8687
Index Copernicus Value: 68 . 16
PubMed - National Library of Medicine - ID: 101731606

International Journal of Medical Science and Innovative Research (IJMSIR)
IJMSIR : A Medical Publication Hub
Available Online at: www.ijmsir.com
Volume – 5, Issue –3, June - 2020, Page No. : 498 - 502

Exploring the Novel Therapeutic options in Global Pandemic COVID 19

[1]Prof. Dr Yuvarajan Sivagnanamne, MD, DNB, FCCP, Dept. of Pulmonary Medicine, SMVMCH, Pondicherry University, Puducherry

[2]Dr. K. Durga Yuvarajan, MD, Associate Professor,Dept of OBGY, SLIMS, Bharath University, Puducherry

[3]Dr. Praveen Radhakrishnan, Assistant Professor,Dept of Respiratory Medicine, SMVMCH, Pondicherry University

[4]Dr.Antonious Maria Selvam, Assistant Professor,Dept of Respiratory Medicine, SMVMCH, Pondicherry University

Corresponding Author: Prof. Dr Yuvarajan Sivagnanamne, MD, DNB, FCCP, Dept. of Pulmonary Medicine, SMVMCH, Pondicherry University, Puducherry

Citation this Article: Prof. Dr Yuvarajan Sivagnanamne, Dr. K. Durga Yuvarajan, Dr. Praveen Radhakrishnan, Dr.Antonious Maria Selvam, "Exploring the Novel Therapeutic options in Global Pandemic COVID 19", IJMSIR- June - 2020, Vol – 5, Issue -3, P. No. 498 – 502.

Type of Publication: Review Article

Conflicts of Interest: Nil

Introduction

In the prevailing novel coronavirus disease 2019 (COVID-19) Global Pandemic spreads, major focus is interrupting its transmission with the standard public health measures on early diagnosis, tracing of contacts and isolation of patients. The current scenario warrants an urgent development of potential strategies and therapeutic options which is a major public health concern. More robust data on antiviral drugs which are effective against COVID 19 is yet to come. Both coronavirus disease 2019 (COVID-19) and severe acute respiratory syndrome (SARS) are characterised by an overexuberant inflammatory response and, for SARS, viral load is not correlated with the worsening of symptoms[1][2].

In this short commentary, We would like to discuss the possible therapeutic options with Montelukast, Leflunamide and Pycnogenol for this novel pandemic, Covid-19.

Montelukast is one of the most commonly used drug among the pulmonologists as an add on therapy in the clinical management of Asthma.Standard dosage in adults is usually 10mg once a day.Various studies quote montelukast as potential anti inflammatory agent when given in higher doses .Doses upto 1000mg is found non toxic in clinical trials.

Cysteinyl leukotrienes (CysLTs) are lipoxygenase products derived from the metabolism of arachidonic acid and they are potent endogenous mediators of inflammation. Montelukast is a leukotriene receptor antagonist (LTRA) that acts as an antagonist of CysLT1R, blocking its signal transduction without affecting cysteinyl-LT signalling through CysLT2R, or the action of leukotriene B4 (LTB4) via the BLT receptors.

Mahir Igde et al studied the antiviral properties of montelukast in human herpes and adeno viruses invitro which showed significant decrease in viral infectivity [3].

1. Blood Rev. 2021 Jul;48:100788. doi: 10.1016/j.blre.2020.100788. Epub 2020 Dec 13.

Arterial thrombosis in antiphospholipid syndrome (APS): Clinical approach and treatment. A systematic review.

Cheng C(1), Cheng GY(2), Denas G(1), Pengo V(3).

Author information:
(1)Thrombosis Research Laboratory, Department of Cardiac-Thoracic-Vascular Sciences and Public Health, University of Padova, Padua, Italy.
(2)Department of Cardiovascular Surgery, The First Affiliated Hospital of Xiamen University, Xiamen, China.
(3)Thrombosis Research Laboratory, Department of Cardiac-Thoracic-Vascular Sciences and Public Health, University of Padova, Padua, Italy; Arianna Foundation on Anticoagulation, Bologna, Italy. Electronic address: vittorio.pengo@unipd.it.

Thrombotic Antiphospholipid Syndrome (APS) is a condition affecting young individuals in whom a thromboembolic event occurs in the presence of circulating antiphospholipid antibodies (aPL). An extensive body of literature has covered the most common clinical presentation of the syndrome, venous thromboembolism. Arterial thrombosis in APS, a lesser clinical expression, is less studied. This review will concentrate on the body of literature concerning pathogenesis, clinical presentation and management of arterial thrombosis in APS.

DOI: 10.1016/j.blre.2020.100788
PMID: 33341301 [Indexed for MEDLINE]

Double Trouble: A Rare Association between Chronic Total Occlusion of the Left Main Coronary Artery and Colonic Malignancy

Ashida Thulaseedharan Sarojadevi[1] Arunkumar Arasappa[2] Priscilla Rubavathy Eugin[3]
Krishna Prabu Ramaraj[4] Anto Merladoss Fernando[5]

[1]Department of Cardiology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
[2]Cardiothoracic and Vascular Surgery, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
[3]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
[4]Department of Anaesthesiology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India
[5]Department of General Surgery, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Address for correspondence Priscilla Rubavathy Eugin, MBBS, MD, No. 5, 2nd Cross Street, Kumaran Nagar, Lawspet, Pondicherry 605008, India (e-mail: priscilla.rubavathy@gmail.com).

J Health Allied Sci NU 2021;11:47–49

Abstract

Emerging evidence has shown an association between cardiovascular (CV) disease and cancer due to shared risk factors and biological mechanisms especially chronic inflammation. The objective of this case report is to highlight the association between these two lethal diseases and the challenges in the management of coronary artery disease in patients with coexisting malignancy.

A 65-year-old nonsmoker, nondiabetic, and normotensive male presented with a history of abdominal pain and significant weight loss. Colonoscopy and biopsy showed adenocarcinoma of the ascending colon, and he was planned for right hemicolectomy. Electrocardiogram exercise stress test performed as a part of preoperative evaluation was strongly positive. Coronary angiography was suggestive of Chronic total occlusion of the left main coronary artery. Though the syntax score was intermediate, coronary artery bypass grafting was decided as the revascularization strategy as he needed early surgery for the colonic malignancy. A month later, he underwent right hemicolectomy.

Clinicians should be aware of the association between CV disease and cancer as they are likely to face similar situations where both coexist. Understanding the connections between heart disease and cancer will help to formulate combined preventive guidelines.

Keywords
- chronic total occlusion
- LMCA
- colonic malignancy

Introduction

Chronic total occlusion (CTO) of the left main coronary artery (LMCA) is uncommon, and survival depends on good collaterals from the right coronary artery (RCA). Emerging evidence suggests a relationship between cancer and coronary artery disease (CAD) due to shared risk factors and biological mechanisms especially chronic inflammation.

The management of CAD in cancer patients can be challenging due to issues related to cancer treatment or the

published online
November 10, 2020

DOI https://doi.org/10.1055/s-0040-1721154
ISSN 2582-4287.

Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

Insect tattoos

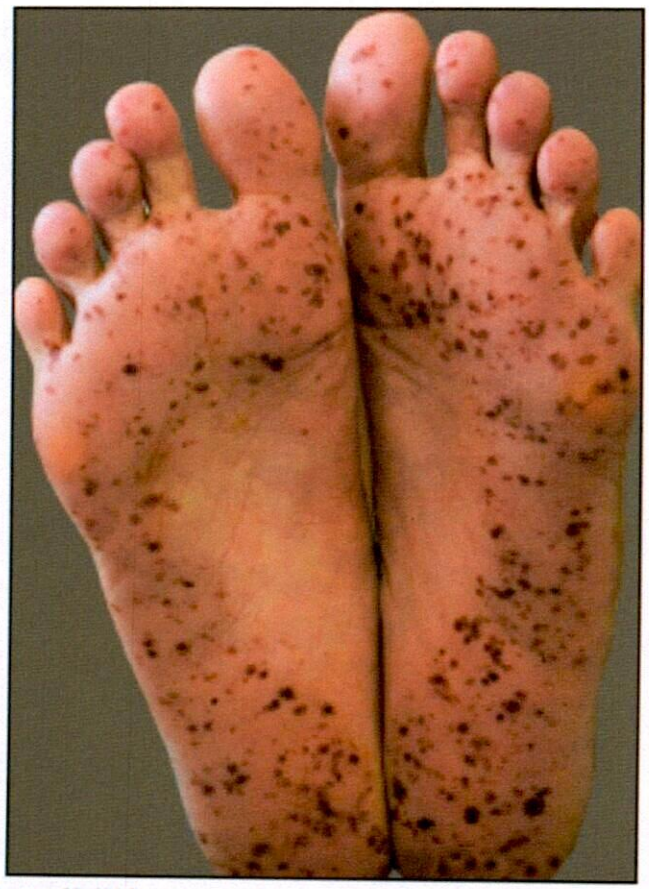


Figure 1: Multiple irregular light brown to blackish brown macules of varying sizes over bilateral soles

A 62-year-old male patient presented with sudden-onset asymptomatic, multiple irregular light brown to blackish-brown macules of size varying from 0.1 to 0.7 mm on bilateral soles [Figure 1]. The insteps were spared. There was history of him walking barefoot in his grocery shop, where there were multiple insects crawling over the floor during the monsoon season. The macules could not be removed with soap and water, but faded partially on scrubbing with acetone. A diagnosis of burrowing bug (*Chilocoris assmuthi*) pigmentation was made. Insects such as *Kermococcus vermilis* (kermes dye), *Kerria lacca* (lac dye), and Cochineal species (scarlet, orange, red tints) have been used as sources of dyes since ancient times. Burrowing bug produces blackish brown pigmentation when crushed. This may be due to insect pigment, ingested pigments, or the colour may

Access this article online

Quick Response Code:

Website: www.ijdvl.com

DOI: 10.4103/ijdvl.IJDVL_226_18

How to cite this article: Meghana V, Gopinath H, Karthikeyan K. Insect tattoos. Indian J Dermatol Venereol Leprol 2020;86:382-3.

Received: April, 2018. Accepted: February, 2019.

Am. J. Trop. Med. Hyg., 101(1), 2019, p. 5
doi:10.4269/ajtmh.19-0109

Images in Clinical Tropical Medicine

Kissing Lesions in Paederus Dermatitis

Palaniappan Vijayasankar,* Hima Gopinath, and Kaliaperumal Karthikeyan

Department of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

A 26-year-old south Indian laborer presented with two well-defined erythematous plaques with central cyanotic hue, equidistant from his right elbow crease on flexor aspect (Figure 1). The patient had associated burning sensation at the site of lesion. The patient slept outdoors the night before and noticed the lesions immediately after waking up in the morning. The lesions were typical of kissing lesions of paederus dermatitis that occurs because of the transfer of the irritant from one area to the adjacent areas of skin.[1] The diagnosis of paederus dermatitis was made, which is common in this region. The patient was treated with topical betamethasone and fusidic acid. The lesions resolved in 2 weeks without residual pigmentation.

Paederus dermatitis is an acute irritant contact dermatitis caused by the accidental crushing of the *Paederus* beetle, which releases its coelomic fluid containing the potent vesicant paederin.[2] Although paederus dermatitis is seen in all zoogeographic regions across the world, it is more common in humid tropical and subtropical regions with higher incidence during rainy season. The *Paederus* group of insects belongs to the Staphylinidae family, order Coleoptera.[3] *Paederus* beetles are nocturnal in nature and draws itself to incandescent and fluorescent lights.[4]

On crushing the insect, there is erythema followed by vesiculation, crusting, and desquamation. The lesions are self-limiting. However, hyperpigmentation is a common sequela that may last for a month. Extensive exfoliation and ulceration can also occur. Apart from kissing lesions, other common morphological variants include dermatitis linearis and localized pustular dermatitis. There may be passive transfer of toxin to the genitals through fingers, producing lesions there. Similarly, ocular involvement also can occur, which may present as keratoconjuctivitis or perforbital dermatitis popularly known as "Nairobi Eye." The lesions are usually noticed on awakening in the morning because of the nocturnal nature of the insects. It is thus termed as "night burn" or "wake and see" disease.[5] Treatment of paederus dermatitis initially involves removing the irritant by washing the area with soap and water, and using wet compresses followed by the application of topical steroid.[4]

Received February 5, 2019. Accepted for publication February 24, 2019.

Authors' addresses: Palaniappan Vijayasankar, Hima Gopinath, and Kaliaperumal Karthikeyan, Department of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India. E-mails: vijayasankarpalaniappan@gmail.com, hima368@gmail.com, and karthikderm@gmail.com.

*Address correspondence to Palaniappan Vijayasankar, Department of Dermatology, Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, No. 14, P.S.R.V. Iyer, Bharathiyar St., Vasantha Nagar, Villianur, Pondicherry 605110, India. E-mail: vijayasankarpalaniappan@gmail.com

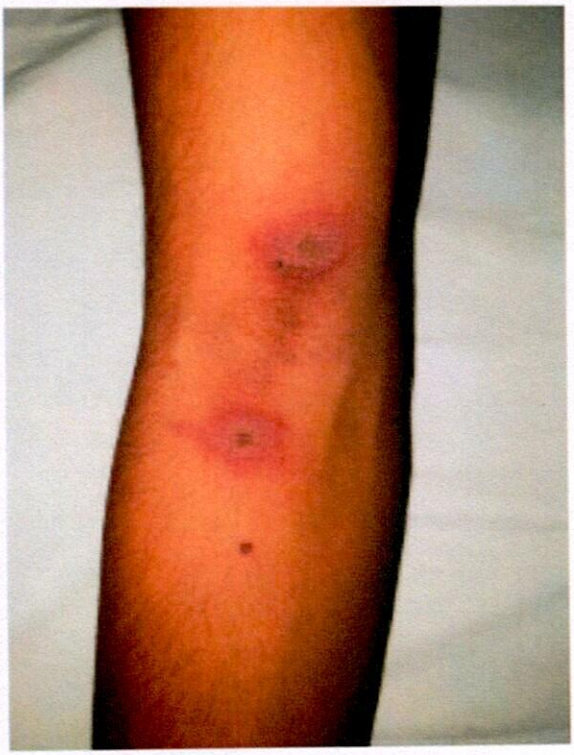


Figure 1. Two well-defined erythematous plaques with central cyanotic hue. This figure appears in color at www.ajtmh.org.

REFERENCES

1. Gnanaraj P, Venugopal V, Mozhi MK, Pandurangan CN, 2007. An outbreak of *Paederus* dermatitis in a suburban hospital in South India: a report of 123 cases and review of literature. *J Am Acad Dermatol 57:* 297–300.
2. Turan E, 2014. *Paederus* dermatitis in Southeastern Anatolia, Turkey: a report of 57 cases. *Cutan Ocul Toxicol 33:* 228–232.
3. Mammino JJ, 2011. *Paederus* dermatitis: an outbreak on a medical mission boat in the Amazon. *J Clin Aesthet Dermatol 4:* 44–46.
4. Singh G, Yousuf Ali S, 2007. *Paederus* dermatitis. *Indian J Dermatol Venereol Leprol 73:* 13–15.
5. Karthikeyan K, Kumar A, 2017. *Paederus* dermatitis. *Indian J Dermatol Venereol Leprol 83:* 424–431.

Original Research Article

International Physiology
Volume 7 Number 1 January - April 2019
DOI: https://dx.doi.org/10.21088/ip.2347.1506.7119.6

Impact of Stress and Personality on Heart Rate Variability (HRV) in Prehypertensives

Mangani Mangalavalli Shanmugarajah[1], Premaraja Ramalingam[2], Senthil Velou Munian[3]

Author Affiliation

[1]Assistant Professor, Dept. of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry 605107, India. [2] Assistant Professor, Dept. of Physiology, Sri Lakshmi Narayana Institute of Medical Sciences, Osudu Agaram Village, Villianur Commune, Kudapakkam Post, Puducherry, 605502, India. [3]Assistant Professor, Dept. of Physiology, All India Institute of Medical Sciences, Mangalagiri, Andhra Pradesh 520008, India.

Corresponding Author

R. Premaraja, Assistant professor, Department of Physiology, Sri Lakshmi Narayana Institute of Medical Sciences, Osudu Agaram Village, Villianur Commune, Kudapakkam Post, Puducherry, 605502, India.

E-mail: Premaraja_r@yahoo.com

Received on: 24.02.2019

Accepted on: 16.03.2019

Abstract

Stress is an indispensable aspect of our daily life. Individual of Type-A or type-B personalityrespond to the same stressful event differently. Aim of this study was to assess theimpact of stress and personality on Heart Rate Variability (HRV) in prehypertensives. 115 participants were categorized into type-A and type-B personalities based on modified jenkin's questionarie as normotensives and prehypertensives based on their blood pressure recordings. During the mental stress, the TP, HF nu, HF LF were decreased ($p<0.05$). The LF nu and LF/HF ratio were increased ($p<0.05$), which was statistically significant, indicating an increased sympathetic activity and decreased parasympathetic activity in type-A prehypertensives. We can conclude that the effect of mental stress on HRV in type –A prehypertensives was much more than type-B personalities. This proves that type-A prehypertensives have a hyperactive sympathetic system and are more susceptible to stress than type-B individuals.

Keywords: Type-A Personality; Type-B Personality; Prehypertension, Heart Rate Variability; Stress.

How to cite this article:

Mangani Mangalavalli Shanmugarajah, Premaraja Ramalingam, Senthil Velou Munian. Impact of Stress and Personality on Heart Rate Variability (HRV) in Prehypertensives. International Physiology. 2019;7(1):35-41.

Introduction

Stress is an increasing occupational health problem and a significant cause of economic loss [2]. Stress may cause work related illness either directly or indirectly [3]. Our body tries to communicate with us through these signs which when neglected causes serious health problems like hypertension, cardiac diseases.

Prehypertension is systolic BP from 120 to 139 mmHg or a diastolic BP of 80 to 89 mmHg. Prehypertension is a risk factor for cardio vascular disease, decreasing the life expectancy of an individual by 5 years, as it often develops into hypertension (50% of people in 4 years) [2,4,5,6].

Prevalence of prehypertension in India is around 7% [9] with an increase seen in south India. Prehypertension is often asymptomatic, so all the more care is needed in identifying and treating them with life style modifications and curtailing risk factors like obesity, sedentary life style, high sodium foods, alcohol, smoking, family history and to start drugs if needed [4].

The general healthy population is classified broadly into two main categories on the basis of their response to stress, as type-A and type-B personalities. Type-A being always in a rush, to accomplish more in a less time. Try to do more than 2 or 3 activities at a time and feels guilty for relaxing for a few hours. Whereas type-B personalities believe in the virtue of patience, can relax and do nothing for days without feeling

Case Report

Management of Pemphigus Vulgaris with Rituximab: A Case Report and Brief Review on Emerging Treatment Options

Mossiamsni Francis, Naga Leela Guntuku[1], Dhandu Leena, R. Geetha[2]

Department of Oral Medicine and Radiology, Ragas Dental College and Hospital, Uthandi, [1]Department of Oral Medicine and Radiology, Sri Venkateshwara Dental College and Hospital, Off. Old Mahabalipuram Road, Near Navalur, Thalambur, Chennai, Tamil Nadu, [2]Department of Dentistry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Pemphigus vulgaris is the most common autoimmune vesiculobullous disorders. It presents with flaccid bullae on the skin and erosions on the mucosa. Severe cases can be life-threatening and hence prompt treatment can prevent untoward consequences. Earlier, steroids were the mainstay of treatment but it causes further medical problems. Nevertheless, new studies have emerged about the pathogenesis of the diseases and treatment protocols have been updated with newer drugs that had comparatively less adverse effects. We report a case of pemphigus vulgaris with extensive involvement of skin and oral mucosa treated with rituximab and adjuvant immunosuppressants and a brief update on various treatment protocols.

Keywords: Corticosteroids, pemphigus vulgaris, rituximab

Introduction

Pemphigus is a group of autoimmune, blistering disease which is potentially fatal presenting as blisters and erosions involving the skin and mucosa. The origin of the name pemphigus is from the Greek word "Pemphix" meaning bubble or blister.[1] Pemphigus vulgaris is the most common type with incidence rate of 0.1–0.5/1000000 population/year.[2] This disease has a female predilection and shows a peak in the fifth and sixth decade of life. Oral lesions precede the occurrence of skin lesions in over 70% of cases and in cutaneous disease 90% of cases show concomitant oral lesions. The integrity of skin and mucosal keratinocytes is maintained by cell-cell adhesion molecules, namely desmosomes.[3] In pemphigus, IgG autoantibodies are directed against desmogleins causing breakdown of skin and mucosal barrier which is evident as an intraepithelial blister. This case report discusses a severe case of pemphigus vulgaris treated with a multidisciplinary approach by dentists and dermatologists using rituximab and adjuvant immunosuppressants as first line of treatment instead of conventional corticosteroid therapy.

Case Report

A 55-year-old female patient reported with a complaint of ulcers in her mouth for the past 3 months. On further questioning, she revealed that she first developed bullae on her chest 5 months back which ruptured to form erosion and the lesion healed spontaneously leaving behind scab. Later she developed multiple ulcers in mouth which affected her normal oral functions. Her medical history was significant for epilepsy and she was under phenytoin for past 30 years.

Clinical examination revealed erythematous lesions with crustation of size 1 × 1.5 cm, irregular in shape which bleeds on touch on the lower lip as shown in Figure 1. Erosions were present on the chest and trunk of size 1 × 1 cm, oval, erythematous base, and surrounded by erythematous halo as shown in Figure 2. Intraoral examination revealed irregular ulcers in the lower labial mucosa below the vermilion border of size 1.5 × 2 cm, with erythematous base without surrounding erythematous halo, bleeds on touch. Ulcer involving the labial

Address for correspondence: Dr. Naga Leela Guntuku, Department of Oral Medicine and Radiology, Sri Venkateshwara Dental College and Hospital, Off. Old Mahabalipuram Road, Near Navalur, Thalambur, Chennai - 600 130, Tamil Nadu, India.
E-mail: leela.guntuku@gmail.com

Access this article online

Quick Response Code:

Website: www.jiaomr.in

DOI: 10.4103/jiaomr.jiaomr_132_19

How to cite this article: Francis M, Guntuku NL, Leena D, Geetha R. Management of pemphigus vulgaris with rituximab: A case report and brief review on emerging treatment options. J Indian Acad Oral Med Radiol 2019;31:386-90.

Received: 12-07-2019 **Revised:** 26-08-2019
Accepted: 18-11-2019 **Published:** 03-03-2020

Identification of subclinical cognitive impairment in chronic obstructive pulmonary disease using auditory P300 event related potential

Soundariya Krishnamurthy[1], Yuvarajan Sivagnaname[2], Gokul Chandu Gumallapu[3]

[1]Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry; [2]Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry; [3]Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Adequate cognitive functioning in chronic obstructive pulmonary disease (COPD) patients is essential to understand the nature of the disease, adherence to treatment, and for leading a better quality of life. While cognitive impairment in severe forms of COPD have been well documented, identification of subclinical cognitive impairment in stable COPD patients remains crucial for planning prevention strategies. Hence the present study aimed to study and compare the cognitive function between the COPD patients, and normal individuals. The cognitive function was assessed in 42 stable COPD patients and 42 normal individuals with Mini Mental State Examination (MMSE), and auditory P300 event related potentials. Baseline characteristics and the cognitive parameters were compared between the COPD patients and the normal individuals; a $p<0.05$ was considered statistically significant. The latency of the P300 waves was significantly ($p<0.05$) prolonged (304.27±20.73 in COPD, 291.11±24.53 in normal individuals), and the amplitude (4.36±1.56 in COPD, 5.46±3.12 in normal individuals) was significantly reduced in the COPD patients compared to the normal individuals. MMSE scores were also significantly ($p<0.001$) different between the COPD patients (26.97±0.89), and the normal individuals (27.80±0.83). Cognition may be affected even at the earlier stages of the disease among the COPD patients, as evident by changes in the P300 values. Auditory P300 event related potential may be used as an adjunct to the routine MMSE examination, as it serves as an effective tool in identifying the cognitive impairment in different stages of COPD. This may help the patients to adopt prevention strategies that help to avoid adverse effects on cognition in future.

Correspondence: Yuvarajan Sivagnaname, Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet Puducherry 605107, India.
Mobile: +91.9789156785.
E-mail: sivagnanamc@yahoo.com

Contribution: All authors contributed equally.

Conflict of interest: The authors declare no potential conflict of interest.

Key words: Cognition; COPD; MMSE; P300.

Received for publication: 23 January 2019.
Accepted for publication: 10 May 2019.

Monaldi Archives for Chest Disease 2019; 89: 1039
doi: 10.4081/monaldi.2019.1039

Introduction

Chronic obstructive pulmonary disease (COPD) may be considered as a complex disorder associated with several systemic consequences, and comorbidities [1]. Understanding and identification of the comorbidities in COPD may help to recognize the pattern of the disease, and in planning interventional strategies. Adequate cognitive functioning in patients is essential to understand the nature of the disease, adherence to treatment, and for leading a better quality of life. Cognitive dysfunction may also be associated with increased morbidity and mortality. There has been increased recognition of cognitive impairment in patients with severe COPD in the past few years [2,3]. Hypoxemia, systemic inflammation, associated comorbidities like smoking, and several other factors have been linked with cognitive dysfunction in COPD [4].

Literature search on cognitive functioning in COPD patients revealed conflicting results. While some studies identified cognitive impairment in end stages of COPD [5], and during acute exacerbations [6], few studies identified mild cognitive impairment even in non-hypoxemic stable COPD patients [7]. Hence degree of cognitive dysfunction in different stages of COPD need to be explored. Prior studies that studied cognitive function in COPD patients relied on MMSE mini-mental state examination (MMSE), and other battery of tests, which are well known to be influenced by several confounding factors [8,9].

Event related potentials are the voltage changes induced within the brain in response to a variety of sensory, motor and cognitive processes. P300 is a long latency endogenous cortically generated positive wave form of auditory event related potential, with maximum peak around 300 milliseconds, post stimulus [10,11]. It is widely recognized as a valid tool in assessing the cognitive function. The changes in P300 amplitude reflect the nature of information processing and P300 latency is related with cognition ability, and attention. Unlike other psychometric tests, event related potentials are not influenced by personality traits, or education-

Case Report

Management of Pemphigus Vulgaris with Rituximab: A Case Report and Brief Review on Emerging Treatment Options

Mossiliamani Francis, Naga Leela Guntaka[1], Dhanda Leena, R. Geetha[2]

Department of Oral Medicine and Radiology, Rajas Dental College and Hospital, Uthandi, [1]Department of Oral Medicine and Radiology, Sri Venkateshwara Dental College and Hospital, Off. Old Mahabalipuram Road, Near Navalur, Thalambur, Chennai, Tamil Nadu, [2]Department of Dentistry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Pemphigus vulgaris is the most common autoimmune vesiculobullous disorders. It presents with flaccid bullae on the skin and erosions on the mucosa. Severe cases can be life-threatening and hence prompt treatment can prevent untoward consequences. Earlier, steroids were the mainstay of treatment but it causes further medical problems. Nevertheless, new studies have emerged about the pathogenesis of the diseases and treatment protocols have been updated with newer drugs that had comparatively less adverse effects. We report a case of pemphigus vulgaris with extensive involvement of skin and oral mucosa treated with rituximab and adjuvant immunosuppressants and a brief update on various treatment protocols.

Keywords: Corticosteroids, pemphigus vulgaris, rituximab

Introduction

Pemphigus is a group of autoimmune, blistering disease which is potentially fatal presenting as blisters and erosions involving the skin and mucosa. The origin of the name pemphigus is from the Greek word "Pemphix" meaning bubble or blister.[1] Pemphigus vulgaris is the most common type with incidence rate of 0.1–0.5/1000000 population/year.[2] This disease has a female predilection and shows a peak in the fifth and sixth decade of life. Oral lesions precede the occurrence of skin lesions in over 70% of cases and in cutaneous disease 90% of cases show concomitant oral lesions. The integrity of skin and mucosal keratinocytes is maintained by cell-cell adhesion molecules, namely desmosomes.[3] In pemphigus, IgG autoantibodies are directed against desmogleins causing breakdown of skin and mucosal barrier which is evident as an intraepithelial blister. This case report discusses a severe case of pemphigus vulgaris treated with a multidisciplinary approach by dentists and dermatologists using rituximab and adjuvant immunosuppressants as first line of treatment instead of conventional corticosteroid therapy.

Case Report

A 55-year-old female patient reported with a complaint of ulcers in her mouth for the past 3 months. On further questioning, she revealed that she first developed bullae on her chest 5 months back which ruptured to form erosion and the lesion healed spontaneously leaving behind scab. Later she developed multiple ulcers in mouth which affected her normal oral functions. Her medical history was significant for epilepsy and she was under phenytoin for past 30 years.

Clinical examination revealed erythematous lesions with crustation of size 1 × 1.5 cm, irregular in shape which bleeds on touch on the lower lip as shown in Figure 1. Erosions were present on the chest and trunk of size 1 × 1 cm, oval, erythematous base, and surrounded by erythematous halo as shown in Figure 2. Intraoral examination revealed irregular ulcers in the lower labial mucosa below the vermilion border of size 1.5 × 2 cm, with erythematous base without surrounding erythematous halo, bleeds on touch. Ulcer involving the labial

Address for correspondence: Dr. Naga Leela Guntaka, Department of Oral Medicine and Radiology, Sri Venkateshwara Dental College and Hospital, Off. Old Mahabalipuram Road, Near Navalur, Thalambur, Chennai - 600 130, Tamil Nadu, India.
E-mail: leela.guntaka@gmail.com

How to cite this article: Francis M, Guntaka NL, Leena D, Geetha R. Management of pemphigus vulgaris with rituximab: A case report and brief review on emerging treatment options. J Indian Acad Oral Med Radiol 2019;31:386-90

Received: 12-07-2019 **Revised:** 26-08-2019
Accepted: 18-11-2019 **Published:** 03-03-2020

Access this article online

Quick Response Code:

Website: www.jiaomr.in

DOI: 10.4103/jiaomr.jiaomr_132_19

International Journal of Clinical and Diagnostic Pathology

ISSN (P): 2617-7226
ISSN (E): 2617-7234
www.pathologyjournal.com
2020; 3(4): 27-31
Received: 10-08-2020
Accepted: 16-09-2020

Dr. Ramya Gandhi
Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Dr. Erli Amel Ivan
Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Dr. Shafna Azeez
Post Graduate, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Dr. Sriram V
Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Corresponding Author:
Dr. Ramya Gandhi
Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Analysis of histomorphological study in Hansen's disease: A hospital based study done in rural population

Dr. Ramya Gandhi, Dr. Erli Amel Ivan, Dr. Shafna Azeez and Dr. Sriram V

DOI: https://doi.org/10.33545/pathol.2020.v3.i4a.309

Abstract
Leprosy, also known as Hansen's disease is a chronic infectious disease caused by Mycobacterium Leprae. It still continues to be a major public health problem in India.

AIM: The study was aimed at analysing the histomorphological features of leprosy in skin biopsies and based on histological findings they were categorised according to Ridley-Joplings classification. Clinical correlation was also done wherever possible.

Materials and methods: After adequate fixation of skin biopsies with 10% formalin, routine processing was done and tissue embedded in paraffin section of 5µ thickness and then stained with Hematoxylin and Eosin (H&E) and Fite-Faraco stain, subsequently studied under microscope.

Results: Total of 35 skin biopsies were studied, with the mean age of presentation ranging from 14-72 years, showing male predominance. Borderline tuberculoid (37.14%) was the most common type. Atrophic epidermis was seen only in 9 cases but Grenz zone was present in all 12 cases of Lepromatous leprosy. Epithelioid granuloma is the commonest finding in Borderline Tuberculoid type. Clinico histomorphological correlation was made in 23 cases and discoherence was found in remaining 12cases.

Conclusion: Correlation of clinical and histopathological features along with bacteriological index plays a pivotal role for accurate typing and for prognostication. Clinicopathological concordance is highest in polar forms, and being least in Indeterminate Leprosy (IL).

Keywords: Histopathological features, clinical presentation, Ridley-Jopling classification, leprosy

Introduction

Leprosy is a non fatal, chronic infectious disease caused by *Mycobacterium leprae*, with different clinicopathological forms, depending on the immune status of the patient [1]. WHO implementation of Multidrug therapy has contributed leprosy to be a less prevalent infection with less than one case per 10,000 population with 90% of its endemic countries [2]. In India the prevalence rate has reduced from 57 per 10,000 in 1981 to 0.84 per 10,000 in 2000 [3]. Clinical presentation includes Skin lesion such as hypo pigmented macules, erythematous plaques, papules and nodules. Neural involvement include numbness, loss of sensation, neuritis and disability. Major cause of morbidity in leprosy are its unique tropism of *M. leprae* for the peripheral nerves (from large nerve trunks to microscopic dermal nerves) and certain immunologically mediated reactional states. When left untreated, the tendency of disease progression to characteristic deformities and the recognition in most cultures that the disease is communicable from person to person have historically resulted in profound social stigma. Clinical diagnosis is confirmed by histopathological examination of skin biopsy & determination of Bacterial index (BI) [4]. The gold standard for diagnosis of leprosy is by histological examination [5]. The Patients in lepromatous group is the main source of infection and discharged into environment through oronasal secretion and from skin ulceration. The nasal mucosa plays the main role as the entry and exit of leprosy bacilli is through the nasal mucosa [6]. The categorization of leprosy was done according to Ridley-Jopling classification (1966). It is based on immunological, histological and microbiological parameters, grouped as: Tuberculoid (TT), Borderline tuberculoid (BT), Borderline borderline (BB), Borderline lepromatous (BL), Lepromatous leprosy (LL) [7].

JMSCR Vol||08||Issue||12||Page 221-223||December 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i12.37

Journal Of Medical Science And Clinical Research

A Case Report of Heart Block due to Intracranial Hemorrhage

Authors
Dr Manomenane.M[1], Dr A.K. Badrinath MD General Medicine[2], Dr S. Suresh Babu MD General Medicine[3]
[1]Post Graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital
[2]Professor and Head of the Department, General Medicine, SMVMCH
[3]Assistant Professor, Department of General Medicine, SMVMCH

Abstract
Brain and heart have many connections both in disease and physiology. Most of the literature refers to neurological complication of underlying cardiac disease. In this case report we present a cardiac complication due to acute stroke, which is rather frequent in clinical practice. Here we present a patient with second degree heart block followed by neurological deficit, due to acute intracranial hemorrhage. The heart block regressed along with neurological stabilization a few days later.

Introduction

Acute stroke has been associated with a variety of medical complications including cardiac abnormalities like myocardial infarction, stress cardiomyopathy and arrhythmias. Cardiac arrhythmias in acute stroke leads to hemodynamic instability causing cerebral hypoperfusion to critical areas, which has a negative impact on short term prognosis. It also increases risk of sudden cardiac death and recurrent thromboembolism particularly in patients with intracranial hemorrhage. The greatest risk of arrhythmias is within first 24hrs of stroke and with marked decline in time.

Case Report

A 24 year old female, gave birth to a male baby by normal vaginal delivery with episiotomy. She had an uneventful antenatal history. Few hours after delivery patient complained of headache with palpitation and sweating. Examination vitals were stable with systemic examination normal. An hour later her heart rate was around 45 per minute, ECG showing second degree heart block. 10 minutes later patient complained of left sided sensory loss from head to toe. Examination showed loss of pain, touch and vibration sensation over the left side of body, with 0/5 power on the left side, with exaggerated deep tendon reflexes and extensor plantar. CT Brain showed hemorrhage in the right gangliocapsular and thalamic region of size 3x3 cm. Her complete haemogram, renal function tests and liver function tests were normal. PT, INR & aPTT were normal and test for APLA syndrome & ANA were negative.

MRI Brain taken on the next day showed hyperintensity involving the right side midbrain, pons, thalamus, basal ganglia, internal capsule and insular cortex suggestive of acute Intracranial Hemorrhage with evidence of midline shift. She was treated with Anti Edema drugs, anti seizure

JMSCR Vol||08||Issue||12||Page 234-236||December 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i12.39

Journal Of Medical Science And Clinical Research

A case report of stroke due to brain stem tuberculoma

Authors
Dr Manomenane.M[1], Dr A.K. Badrinath MD General Medicine[2], Dr S. Suresh Babu MD General Medicine[3]
[1]Post Graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital
[2]Professor and Head of the Department, General Medicine, SMVMCH
[3]Assistant Professor, Department of General Medicine, SMVMCH

Abstract
Tuberculosis still highly prevalent in developing countries commonly affects the lungs. Central nervous system (CNS) involvement in tuberculosis is common in India but tuberculoma a manifestation of tuberculosis which mimics a tumor is not common.[1] most of the CNS tuberculoma presents with seizures or focal signs . here we presents an elderly female with acute CVA with right sided hemiparesis .computed tomography of the brain showed a hyperdense lesion in the left pons. Further contrast enhanced MRI brain revealed left pontine tuberculoma. There are few case reports of tuberculoma presenting as acute stroke.
Keywords: *Stroke, brain stem, tuberculoma.*

Introduction

Tuberculosis a disease caused by acid fast mycobacterium tuberculosis complex bacteria commonly affect the lungs although other organs are involved in about one third of cases .In India with a huge burden of tuberculosis (incidence of 2.2 million cases in 2015) extra pulmonary tuberculosis is a common manifestation.[1] CNS tuberculosis presents as basal meningitis which may complicate by causing obstructive hydrocephalus. Tuberculosis is a rare manifestation of CNS tuberculosis presenting as a space occupying lesion with focal signs or seizures.[3]

Case Report

A 67 years old female patient presented with sudden onset of difficulty in using right upper and lower limb for one day duration .she also had slurring of speech and urinary incontinence. No history of trauma, not a diabetic, hypertensive or coronary artery disease. No history of pulmonary tuberculosis in past or contact history of tuberculosis. On examination patient was conscious and oriented, pallor +, pulse -94 bpm and blood pressure was elevated 160/110mmhg. Cardiac and respiratory auscultation was normal and CNS examination revealed patient conscious and oriented, higher mental functions were intact. Patient had right UMN facial nerve palsy and urinary incontinence. Her power was 2/5 in right upper and lower limb with hypertonia and exaggerated deep tendon reflexes, bilateral plantar extensor. Patient was admitted as a case of acute CVA with right hemiplegia with UMN facial palsy and evaluated.

JMSCR Vol||08||Issue||12||Page 263-266||December 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i12.45

Journal Of Medical Science And Clinical Research

A Case Report of Septic Pulmonary Embolism

Authors
Dr Araveinth.G[1*], Dr A.K. Badrinath[2], Dr S.Suresh Babu[3]
[1]Post Graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital
[2]MD General Medicine, Professor and Head of the Department, General Medicine, SMVMCH
[3]MD General Medicine, Assistant Professor, Department of General Medicine, SMVMCH
*Corresponding Author
Dr Araveinth.G

Abstract
Septic pulmonary embolism (SPE) is one of the uncommon disease where septic thrombi get mobilized from infectious site through vascular system of lungs. The common causes of septic pulmonary embolism are central venous infections, venous thrombophlebitis, iv drug abuse and dental abscess. Most of the cases were associated with infective endocarditis (IE) of the tricuspid valve. But any infection can spread into the lungs. Here we present a 20 year old female patient presented with septic abortion developed septic pulmonary embolism and IE of the tricuspid valve. The causative organism was methicillin resistant staphylococcus aureus and improved with antibiotics and supportive care.
Keywords: *Pulmonary embolism, sepsis,infective endocarditis.*

Case Report

A 20 year old female presented to us with complaints of fever for 7 days duration with loose stools 5 to 6 episodes per day for 5 days and discharge per vaginum for 7 days - minimal and foul smelling. Patient gives history of termination of pregnancy at 3 months gestation by curettage by a quack 7days back, after which she developed the symptoms. Patient is married and has 2 children. Menstrual history normal.

On examination Patient was conscious and oriented , tachypneic and dehydrated, febrile – temp 103 F, pallor ++, pulse – 136/ min low volume and BP – 80/50 mm Hg. Systemic examination revealed no abnormalities. The patient was admitted with the diagnosis of septic abortion in septic shock.

Her complete haemogram revealed anemia with severe thrombocytopenia (haemoglobin – 6.8 g%, total leukocyte count – 8300/ cumm with neutrophil predominance 80% and platelet count – 51000/ cu mm.). Her blood glucose, renal function tests, liver function tests and serum electrolytes were normal.

ECG showed sinus tachycardia, echocardiography was normal and chest X ray normal. Patient was started on iv fluids, inotrope support and iv antibiotics (imipenam and metronidazole) after sending blood, urine and vaginal cultures. Her ultrasound abdomen revealed bulky uterus with retained products of conception. Obstetrician opinion was obtained and dilation and curettage was done on day 3 of admission. Anemia was corrected with blood transfusions.

After 5 days of intensive care treatment patient had persistant fever spikes with increasing

JMSCR Vol||08||Issue||11||Page 344-347||November 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i11.58

IGM Publication Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

Recurring Fever in a Cancer Patient – "Light at the end of the Tunnel" – Case Report

Authors
Dr Venugopal Angamuthu Vignesh Kumar[1]*, Dr Subramanian Girija[2], Dr Subbarayan Madhan Kumar[3], Dr Senthilvelan Thenmozhi[4]
[1]Postgraduate, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India
[2]Professor, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India
[3]Assistant Professor, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India
[4]Postgraduate, Department of General Medicine, Sri Manakula Vinayagar Medical college and Hospital, Puducherry – 605 107, India
*Corresponding Author
Dr Subramanian Girija

Abstract
Recurrent fever can be the manifestation of autoimmune disease, malignancies and infections. Working up the cause of fever in a patient with underlying malignancy and under treatment can be a challenging task. We present a case of 46 years old female with breast carcinoma, who presented with recurrent fever episodes. The patient was evaluated and found to have catheter (tunnelled) related septicaemia, septic emboli and endocarditis. Device related infections need high index of suspicion and treatment should be planned based on the type of catheter and organisms.
Keywords: *Right sided infective endocarditis, septic emboli, tunnelled catheter, device related infection.*

Introduction

Recurrent fever can be the manifestation of a wide range of diseases including autoimmune disease, malignancies and infections. A recurrent fever is defined as >12 episodes over a period of 12 months with a minimal interval of seven days between episodes. Such cases are approached by taking a comprehensive history, detailed physical examination and relevant laboratory investigations. Most unexplained fever are often diagnosed within one week of hospital evaluation or 3 outpatient visits. We present a case of breast carcinoma who has completed a course of chemotherapy and under radiotherapy for the past 1 month.

Case Report

A 46 year old female with left breast carcinoma who underwent modified radical mastectomy and on chemotherapy through a chemo-port in right internal jugular vein presented with complaints of intermittent fever with chills and rigors for one and half a month and altered behavior since 2 days and was treated elsewhere with 5 days course of

How Atopic is Prurigo in the Tropics?: An Etiological Survey in South India

M. Saranya, M. Saritha[1], K. Karthikeyan, T. Mangaiyarkarasi[2]

Departments of Dermatology and Microbiology, Sri Manakula Vinayagar Medical College and Hospital, [1]Department of Dermatology, Indira Gandhi Medical College and Research Institute, Puducherry, India

Sir,

Prurigo nodularis is a chronic inflammatory condition of uncertain etiology, reported to be more common in middle-aged women.[1] The prevalence of atopic diathesis in patients of prurigo has been reported to be as high as 77%.[2] There is no similar data on South Indian patients with prurigo nodularis. Further, *Parthenium hysterophorus* is a weed that grows rampantly in some areas of rural South India. Contact dermatitis to parthenium has been reported to cause prurigo-like nodules.[3] Hence, this pilot study was planned to assess the role of various known etiopathological factors, especially atopy and parthenium sensitivity in our patients of prurigo nodularis.

The present study was a cross-sectional study done over a period of 1 year at the Dermatology Outpatient Department of a tertiary care hospital catering mainly to the rural population of Puducherry and Tamil Nadu. After getting approval from the Institute Ethics Committee, a total of 31 patients with prurigo nodularis, clinically diagnosed by consensus among two independent dermatologists, were recruited over a period of 1 year and evaluated. After obtaining informed consent from the patient, the demographic and clinical details were entered in the predesigned proforma. Skin biopsy, tissue culture and sensitivity, Mantoux test, serum lactate dehydrogenase levels, thyroid function tests, serum immunoglobulin E (SrIgE) levels, and patch tests were done on all the patients. A psychiatry consultation was obtained to assess any comorbid psychiatric disorders or mental stress. Data obtained were tabulated in an Excel chart and summarized using descriptive statistics.

Among the 31 patients enrolled in the study, 23 were females and 8 were males, with an approximate M:F ratio of 1:3. Twelve patients were students and eight were homemakers. Nearly half (n = 14) of the patients were less than 20 years of age (mean ± standard deviation (SD): 31 ± 18.5). Most patients had lesions on their shins [Figures 1 and 2]. None of the patients had any other dermatological disorder or personal or family history of atopy or childhood eczema or flexural dermatitis. However, serum eosinophilia (>5 × 10⁹/L) was seen in 11 patients and raised SrIgE levels (>300 IU/mL) was seen in 14 patients.

Two patients exhibited positive patch tests for fragrance fragrance mix, 1 for parthenium and 1 for colophony. Four patients gave history of significant stress, though none of the patients were diagnosed to have a major or minor psychiatric illness. This was in contrast to a study where 50% of 46 patients were found to have a psychological disorder requiring intervention.[3] However, Iking *et al.* reported absence of a monofactorial underlying psychological factor, and presence of psychological factors occurring in association with other systemic or dermatological factors in only 11 patients (5.6%) in their study.[4] Two patients were diagnosed to have prurigo of pregnancy. Five patients had nutritional anemia. Thyroid function tests were normal in all the patients. Acid-fast bacilli were demonstrated in the tissue of one patient through tissue staining; however, culture did not grow any bacteria. In two other patients, Mantoux test was reactive. Skin biopsy was suggestive of prurigo nodularis in most patients; neural hyperplasia was seen only in two cases. Extravasation of red blood cells without other features

Address for correspondence:
Dr. M. Saritha,
Department of Dermatology, Indira Gandhi Medical College and Research Institute, Puducherry - 605 009, India.
E-mail: saritha_mohanan@yahoo.co.in

Access this article online
Website: www.idoj.in
DOI: 10.4103/idoj.IDOJ_80_18
Quick Response Code:

How to cite this article: Saranya M, Saritha M, Karthikeyan K, Mangaiyarkarasi T. How atopic is prurigo in the tropics?: An etiological survey in South India. Indian Dermatol Online J 2019;10:69-71.

Received: March, 2018. **Accepted:** May, 2018.

ORIGINAL ARTICLE ASIAN JOURNAL OF MEDICAL SCIENCES

Effect of 24-hrs of sleep deprivation on Central Auditory Processing in young people - A Quasi-Experimental study

Naziruddin Husamuddin[1], Shivayogappa S Teli[2]

[1]Assistant Professor, Department of Physiology, Government Vellore Medical College, Vellore, TN, India, [2]Professor and Head, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Submission: 25-07-2020 Revision: 27-08-2020 Publication: 01-11-2020

ABSTRACT

Background: Adequate amount of sleep is the basic need for survival. It is a well-known fact that disturbed sleep, acute or chronic, deteriorates the homeostasis. Sleep deprivation (SD) produces many adverse health consequences by affecting almost all the organ systems and their functions. However, sufficient literature was lacking on the effect of SD on central auditory processing (CAP), especially the temporal resolution component in young individuals. **Aims and Objective:** Therefore, this study aimed to investigate the impact of 24-hrs of sleep deprivation on the temporal resolution ability of young healthy night-shift employees. **Materials and Methods:** It was a Pretest-posttest study design (Quasi-Experimental study) comprising sixty (N = 60) healthy security staff. After the initial survey, Tuning fork tests and Pure Tone Audiometry were performed to rule out hearing loss. Temporal resolution was assessed twice (before and after SD) by Random Gap Detection test (RGDT) where a pair of pure tone was presented at different frequencies with 'intervals of silence' between each pair of tones and average time interval (in milliseconds) was taken. Data analysis was done by SPSS 24 software. **Results:** There was an increase in RGDT values after sleep deprivation 10.70 ± 0.46 (Mean ± SD), but the difference was not significant (p-value = 0.5172) when compared with baseline values 10.65 ± 0.48 (Mean ± SD). **Conclusion:** Based on the research findings, we conclude that 24-hours of acute sleep deprivation didn't show any negative impact on the temporal resolution component of CAP mechanism in young, healthy individuals.

Key words: Central auditory processing; Homeostasis; Pure tone audiometry; Random gap detection test; Sleep deprivation

Access this article online

Website: http://nepjol.info/index.php/AJMS

DOI: 10.3126/ajms.v11i6.30207

E-ISSN: 2091-0576

P-ISSN: 2467-9100

INTRODUCTION

Sleep is a vital biologic process necessary for the survival of all living creatures. In human beings, an adequate amount of sleep is a fundamental requirement in everyday life for maintaining optimal health state i.e. Homeostasis. Existing literature on sleep provides us variety of definitions. In simple terms, sleep is defined as the state of unconsciousness from which a person can be aroused by sensory or other stimuli.[1] Being essential for life, sleep plays an important role in optimal functioning of various physiological processes of nervous, immune, hormonal, cardiovascular, and other systems.

Inadequate sleep or sleep deprivation (SD) is a common problem in modern society affecting almost all humans irrespective of their professions. Numerous factors affect sleep that range from lifestyle factors to various medical conditions. Condensed sleep-time has been associated with many adverse health consequences, which include reduced quality of life, emotional distress, autonomic nervous system imbalance, somatic problems, behavior problems, performance reductions in physical and mental tasks, obesity, hypertension, diabetes mellitus, etc.[2] However, there is a paucity of information on the effect of SD on auditory processing of sound stimuli in young, sleep-deprived adults. Interestingly, by online and

Address for Correspondence:
Dr. Shivayogappa S Teli, Professor and Head, Department of Physiology, Sri ManakulaVinayagar Medical College and Hospital, Puducherry. Mobile: +91-8122557996. E-mail: shivateli222@yahoo.com

Indian Journal of Basic and Applied Medical Research; September 2020: Vol-9, Issue- 4, P. 125 - 132
DOI: 10.36848/IJBAMR/2020/18215.55592

Original article

A cross sectional study on evaluation of cognitive function in subclinical hypothyroidism

[1]Dr.K.Soundariya, [2]Mr.Selvam.V.S , [3]Miss.Nivethitha.N

[1]Professor, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital , Puducherry – 605107
[2]Clinical Psychologist , Department of Psychiatry , Sri Manakula Vinayagar Medical College and Hospital , Puducherry – 605107
[3]Final MBBS Student , Sri Manakula Vinayagar Medical College and Hospital , Puducherry – 605107
Corresponding author: .K.Soundariya ; Email ID: drsoundariya@gmail.com

Abstract

Background: While the cardiovascular and neurologic sequelae of a full blown hypothyroidism is well established, there is lack of evidence on the influence of subclinical hypothyroidism on the cognitive functioning of the individuals. Screening of the individuals for subclinical hypothyroidism at an earlier age and identification of subtle cognitive dysfunction in early stages, may help to decide on the initiation of management.

Aim: The present study aimed to study and compare the cognitive function between the normal individuals and subclinical hypothyroidism

Methodology: The cognitive function was assessed in 52 Subclinical hypothyroidism patients and 50 normal individuals with Mini Mental State Examination (MMSE) and Montreal Cognitive Assessment Test (MoCA). Baseline characteristics and the cognitive parameters were compared between subclinical hypothyroid patients and the normal individuals. $p< 0.05$ was considered statistically significant.

Results: There was no statistically significant difference in the MMSE and MoCA scores between the subclinical hypothyroid patients and normal individuals. However MMSE scores were significantly different between the illiterate normal and individuals with subclinical Hypothyroidism. A positive correlation was observed between the TSH values and the MMSE scores.

Conclusion: Cognition is not affected in subclinical hypothyroidism in literate individuals. However decrement in the cognitive function with advancing age may not be excluded.

Key words: Cognition, MMSE, Subclinical Hypothyroidism

Introduction

Hypothyroidism is the most common of thyroid disorders in India, affecting one in ten adults.[1] Hypothyroidism is characterized by a broad clinical spectrum ranging from an overt state of myxedema, end-organ effects and multisystem failure to an asymptomatic or subclinical condition. Subclinical Hypothyroidism is defined as elevated TSH levels in the presence of normal circulating Free T_3 and T_4 concentrations.[2] Subclinical Hypothyroidism is known to affect 3-15% of the general population.[3] Thyroid hormones exhibit profound effects on central nervous

Original Article

Journal of Advances in Medical Education & Professionalism

Evaluation of one-month foundation course for the first year undergraduate students at a Medical College in Puducherry, India

DEEPIKA VELUSAMI[1], PhD; AMOL R DONGRE[2], MD; RAJENDRA N KAGNE[3], MD

[1]Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry-605 107, India; [2]Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry-605 107, India; [3]Department of Forensic Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry-605 107, India

> Abstract

Introduction: Medical Council of India has revised the undergraduate medical curriculum by introducing "Competency-based Medical Education" which emphasizes the foundation course of one-month duration. This period is said to be essential for students to get acclimatized to the new college environment. The present study evaluated the first one-month foundation course from students and faculty members' point of view.

Methods: The present study was program evaluation. The study participants were all 150 first year medical students joining the college and preclinical department faculty in the academic year, 2019-20. The foundation program was pre-planned and implemented as per the Medical Council of India guidelines. The program was evaluated using a pre-designed questionnaire where the items were aligned with the research question and inputs were obtained from all faculty members. Kirkpatrick framework level 1 was used for evaluation. Feedback was received from the faculty members by force field analysis and from student's using a five-point Likert scale. A summative approach to the qualitative content analysis was done to identify certain themes from the text data and infer meaning for the force field analysis obtained from the faculty. Considering the high rating for most of the sessions, we arbitrarily considered values above 75% to reflect good consensus and below 75% to reflect poor consensus. Consensus measure expressed in percentage was obtained for each item. The quantitative data were analyzed using open Epi info version 7.0.

Results: The consensus scores ranged from 73.7 to 83.3 percent. The sessions on learning styles, student support system, self-directed learning, communication skills, medical ethics, soft skills, and orientation to health systems in India reflected good consensus, indicating that these sessions were well received by the students. Other sessions like stress management, interpersonal skills, presentation skills, email writing and ethics for mobile usage reflected poor consensus, implying the need for further improvement. As per the faculty perception, good coordination, teamwork, and proper planning at interdepartmental and intradepartmental levels were the key features for the successful implementation of the course.

Conclusion: Overall, the sessions in the foundation course were well received by the students. As felt by both students and faculty, more interactive sessions need to be incorporated. The major strength of the course was the skill module, visit to special school, and field visit to the community and primary health center. The findings will help us to improve our next year foundation program to meet the purpose of the Foundation course.

Keywords: Medical students; Medical teaching; Medical college

*Corresponding author:
Deepika Velusami, PhD;
Department of Physiology,
Sri Manakula Vinayagar Medical College and Hospital,
Kalitheerthalkuppam,
Madagadipet,
Puducherry- 605 107, India
Tel: +91-8122795360
Email: deepy943@gmail.com

Please cite this paper as: Velusami D, Dongre AR, Kagne RN. Evaluation of one-month foundation course for the first year undergraduate students at a Medical College in Puducherry, India. J Adv MedEducProf. 2020;8(4):165-171. DOI: 10.30476/jamp.2020.86857.1272.

Received: 7 June 2020
Accepted: 22 August 2020

https://doi.org/10.46389/rjd-2020-1009
www.rjdnmd.org

Rom J Diabetes Nutr Metab Dis
2020; volume 27, issue 1, pages 50-56

Original Article

The Relationship between Non-Linear Analysis of Heart Rate Variability, QTc Interval and Cardiovascular Risk Factors in Young Individuals with Pre-Diabetes

Deepika Velusami [1*], Vijayakumar Raman [2*], Muthu Gopal [3]

[1] Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[2] Department of Physiology, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry, India
[3] Model Rural Health Research Unit, Indian Council of Medical Research-National Institute of Epidemiology, Linked to Tirunelveli Medical College, Primary Health center campus, Kallur, Tirunelveli, India

* Correspondence to: Vijayakumar Raman, Department of Physiology, Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry India. Phone: +91 8248645800; e-mail: sivasvij@gmail.com. Deepika Velusami, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India. Phone: +91 9962279360; e-mail: deepy843@gmail.com

Received: 4 March 2020 / Accepted: 10 March 2020

Abstract

Introduction: Cardiac autonomic functions and cardiovascular risk factors are closely associated with each other. This study aimed to evaluate the cardiac autonomic status employing the Poincaré plot and QTc in young pre-diabetic individuals and correlate it with the cardiovascular risk factors. **Material and Methods:** This was a cross-sectional study. The students participating in the health check-up program organized by the college were the study participants. Basal anthropometric measurements, detailed family, and personal medical history were documented. Autonomic functions were evaluated. Plasma glucose and lipid profile were evaluated biochemically. Based on the impaired fasting plasma glucose and impaired glucose tolerance values, subjects were classified as normal and pre-diabetes mellitus groups. **Results:** A total of 295 subjects (198 normal and 97 pre-diabetes mellitus), were evaluated. Standard descriptor 1 and 2 in the pre-diabetes mellitus group reported a significant decrease, p<0.0001, (95% CI 15.98, 19.07) (95%CI 31.73 37.26) compared to the normal group (95% CI 26.33, 30.27) (95% CI 48.39, 52.71). QTc was significantly increased in the pre-diabetes mellitus group, p<0.0001, (95% CI 415.62, 423.99). Body mass index, fasting plasma glucose, and lipid parameters reported as being significant independent variables were associated with autonomic function test parameters. **Conclusion:** Cardiac autonomic dysfunction starts appearing in the pre-diabetic stage itself. Body mass index and altered lipid profiles showed a significant association with increased blood glucose levels. Early detection at a young age can help to plan better prevention and treatment strategies.

Keywords: Impaired fasting glucose, Oral glucose tolerance, QTc interval, Heart rate variability.

Introduction

In India, 69.1 million individuals have diabetes, making it the Diabetic Capital of the world [1]. The reasons for the alarming increase may be due to rapid socio-economic and nutritional transition, lack of self-awareness, and follow-up programs in the society. As per the "ticking clock hypothesis", the microvascular disease manifestation appears in the precursor stage, before the expression of full-blown clinical type 2 diabetes mellitus [2]. According to the American Diabetes Association, pre-diabetes is Impaired Fasting Glucose (IFG) ranging from 100-125 mg/dL or Impaired Glucose Tolerance (IGT) of 140– 199 mg/dL [3]. Pre-diabetes is related to increased cardiovascular (CV) disease and mortality [4]. Evaluation strategies targeting the younger candidates with increased risk will be a potential boon for the society to plan early interventional strategies.

DOI: 10.7860/JCDR/2021/47157.14958

Original Article

Pharmacology Section

Anticonvulsant Effect of Nebivolol alone and in Combination with Phenytoin against Maximal Electroshock-induced Seizures in Mice

ANURANJANI DHAMODHARAN, NITYA SELVARAJ, R MEENAKSHI

ABSTRACT

Introduction: Phenytoin is widely used in treatment of generalised tonic clonic seizures but its adverse effects make its usage limited. Hence forth, there is a need for newer antiepileptics. Studies have shown antiepileptic property for nebivolol in combination with phenytoin hence, reducing the dosage of phenytoin and its adverse effects and toxicities.

Aim: To evaluate the anticonvulsant property of nebivolol alone and in combination with phenytoin against Maximal Electroshock Seizures (MES) in a mouse model.

Materials and Methods: This was an experimental animal study on total of 36 swiss albino male mice were randomly assigned to six groups with six animals in each group in December 2019 at Sri Manakula Vinayagar Medical College and Hospital. Group 1 was considered as normal control, Group 2 received Phenytoin 25 mg/kg Intraperitoneal (IP); Group 3 and 4 received Nebivolol 0.25 mg/kg oral and 0.50 mg/kg oral, respectively; Group 5 received 12.5 mg/kg IP and nebivolol 0.25 mg/kg oral; Group 6 received Phenytoin 12.5 mg/kg IP and nebivolol 0.50 mg/kg oral. Anticonvulsant effect of the drugs nebivolol and phenytoin was elicited in mice by MES test. After induction following parameters were recorded for onset of Tonic Hind Limb Extension (THLE), duration of clonus, duration of THLE, number of jerks, recovery time. Statistical analysis was done by ANOVA followed by post-hoc Dunnett t-test.

Results: Significant reduction in duration of THLE ($p<0.01$) and clonus ($p<0.001$) was observed in the group treated with phenytoin (12.5 mg/kg) and nebivolol (0.50 mg/kg).

Conclusion: The present study concludes that the lower dose of phenytoin in combination with nebivolol can reduce seizures induced by MES in mice model.

Keywords: Clonus, Epilepsy, Tonic hind limb extension

INTRODUCTION

Epilepsy, the most common neurological disorder is estimated to affect nearly 65 million population across the globe [1]. In India the prevalence of epilepsy accounts for about 1% of the population [2]. Phenytoin, a conventional antiepileptic drug is effective in the treatment of generalised tonic-clonic seizures, partial seizures and convulsive status epilepticus. Over the year's various adverse effects of phenytoin namely phenytoin encephalopathy on chronic administration have been reported. In view of its potential adverse effects, phenytoin is not recommended as the first choice for treating epileptic seizures [3].

Hypertension, the most prevalent modifiable risk factor for both ischaemic and haemorrhagic stroke, is often associated with epilepsy [4]. Studies reveal that antihypertensives with beta receptor antagonist property such as nebivolol and propranolol possess anticonvulsant action in animal experimental models [5,6]. Nebivolol is a highly cardio selective beta blocker which is devoid of intrinsic sympathomimetic activity and a potent antioxidant and highly lipophilic drug. These properties may be useful as anticonvulsant effect which has been evaluated in previous studies, individually and in combination with lamotrigine and gabapentin [6-8].

The combined effect of nebivolol and phenytoin has not been done so far. Hence, the aim of the study was to evaluate the anticonvulsant effect of nebivolol and its combined effect with phenytoin against maximal electroshock-induced seizures in mice.

MATERIALS AND METHODS

The experimental animal study was conducted in December, 2019 in the animal house at the Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India. Approval from the Institutional Animal Ethics Committee (IAEC/SMVMCH/026/2018) was obtained before starting the study. Good Laboratory Practice (GLP) and Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) guidelines were followed throughout the study.

Study Subjects

Thirty-six naive adult male Swiss albino mice, each weighing 20-25 g were procured from Tamil Nadu veterinary and animal sciences university, Chennai. The animals were housed in groups of six in polypropylene cages and maintained at room temperature (24-27°C) under 12:12 hour light/dark cycle and were acclimatised for a period of 7 days in the animal house prior to the experiment. The mice were put on a standard pellet diet and water ad libitum. The experiment was conducted throughout during the light period especially between 10.00 and 14.00 hours.

Drugs

Nebivolol (Nebistar, Lupin Ltd., Mumbai) at doses of 0.25 mg and 0.50 mg/kg were suspended in 0.25% of Carboxy Methyl Cellulose (CMC) in 0.9% saline solution and administered orally. The standard drug, phenytoin sodium (50 mg/mL), was procured from Pfizer, India and was diluted in 0.9% saline solution to a dose of 12.5 mg/kg. All dosages were freshly prepared on the day of the experiment. Doses were selected based on previous studies [3,6].

Experimental Design

A total 36 mice were randomly assigned to six groups. Each group comprised of six animals. The dosage and route of administration of the drugs in each group are as follows:

Group 1: Vehicle - distilled water 10 mL/kg oral

Group 2: Phenytoin 25 mg/kg Intraperitoneal (IP)

Group 3: Nebivolol 0.25 mg/kg oral

Group 4: Nebivolol 0.50 mg/kg oral

Group 5: Phenytoin 12.5 mg/kg IP and nebivolol 0.25 mg/kg oral

Group 6: Phenytoin 12.5 mg/kg IP and nebivolol 0.50 mg/kg oral.

J Young Pharm, 2020; 12(4) : 386-388.
A multifaceted peer reviewed journal in the field of Pharmacy
www.youngpharmaq.com | www.phinpharm

Case Report

Phenytoin Induced Erythema Multiforme

Dhamodharan Anuranjani, Selvaraj Nitya*, Sivagourounadin Kiruthika
Department of Pharmacology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, INDIA.

ABSTRACT

Phenytoin is conventional antiepileptic drug is effective in the treatment of generalized tonic-clonic seizures but its adverse effects makes its usage limited. We herein present the case of Phenytoin induced Erythema Multiforme. A 65-year-old elderly female presented to our hospital with a 3 days history of itching all over the body, multiple reddish lesions over bilateral arms, forearms, anterior aspect of chest, trunk, bilateral palms and soles. Patient developed skin lesion 1 month after and she started taking phenytoin 100 mg twice a day for left frontal temporal subdural hematoma. Dermatological examination revealed multiple tangloid lesions over the lateral aspect of neck. Phenytoin was discontinued and the skin lesions resolved spontaneously within 2 weeks. The health-care professionals should be aware of such dermatological reactions so that it can be diagnosed and treated early.

Key words: Antiepileptic, Erythema multiforme, Phenytoin.

Correspondence

Dr. Nitya Selvaraj

Associate Professor, Department of Pharmacology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam-605107, Puducherry, INDIA.

Phone: +91 9486606000

Email: anudharnu@gmail.com

DOI: 10.5530/jyp.2020.12.98

INTRODUCTION

The global public health problem in neurological disorder is epilepsy. This affects people of all age groups irrespective of their socioeconomic background and geographic location. This allures to undergo many studies to find out an effective drug to treat.[1] The conventionally used drug for the control of epilepsy is phenytoin. Since then it is being widely used for control all type of tonic–clonic and complex partial seizures till date.[2] As phenytoin has wide pharmacokinetic variability and very low threshold for toxicity its use is being limited.[3] The dermatological adverse reaction reported with the use of phenytoin both in therapeutic and prophylactic dose are urticaria, erythroderma, erythema multiforme (EM), Steven – Johnson syndrome and toxic epidermal necrolysis.[4] EM is caused by the deposition of lymphohistiocytic inflammatory infiltrate around the blood vessels, which in turn causes degenerative changes in the capillary endothelial cells resulting papillary-dermal edema.[5] Many literature reviews divulged the causation of EM associated with phenytoin when used in combination with radiation therapy.[6-10]

Here we report a case of 64-year-old elderly female who developed erythema multiforme following the use of phenytoin.

CASE REPORT

A 65-year-old elderly female presented to the causality department in our hospital with the complaints of itching all over the body, multiple reddish lesions over bilateral arms, forearms, anterior aspect of chest, trunk, bilateral palms and soles for the duration of 3 days. On further evaluation it was revealed that she has been diagnosed to have left frontal temporal subdural hematoma by a private practitioner. The patient was advised to take tablet phenytoin 100 mg twice daily. So, she was taking the tablets for the past 1 month. On examination her vitals were stable. Dermatological examination revealed multiple tangloid lesions over the lateral aspect of neck, few erythromatous papules over anterior trunk, multiple target lesions papules over the flexor and extensor aspect of bilateral forearms (Figure 1), multiple purpuric macules present over anterior aspect of neck region, multiple areas of pinpoint petechiae present bilateral palms and soles. Routine blood investigation was done. The patient was diagnosed as a case of phenytoin induced erythema multiforme. Then she was treated with tablet hydroxyzine 10 mg, tablet prednisolone 20 mg, liquid paraffin external applications (E/A), momate lotion E/A. After obtaining opinion from a neurosurgeon phenytoin was stopped. As antiepileptic was not required at present. The lesions resolved within 2 weeks and recovered completely without any sequalae.

The Naranjo's criteria and (WHO) probability scale were applied to determine the causality for suspected adverse drug reactions. The causality assessment with both scales revealed that adverse reaction due to phenytoin in this case was probable (Table 1 and 2).[11,12]

DISCUSSION

Phenytoin is useful for all types of epilepsy except petit mal epilepsy. It does not cause sedation. Phenytoin has narrow therapeutic range of 10-20 mcg/ml.[13] It has peculiar pharmacokinetic properties, when plasma concentration < 10mcg/ml follows first order and further increase in plasma concentration > 10 mcg/ml saturate metabolic pathway and shifts to zero order elimination. The half-life of phenytoin ranges from 6-24 hrs at plasma concentration < 10mcg/ml but increases to 24-60 hrs in plasma concentration > 10 mcg/ml.[14] So thereby dose titration must be made at small doses in longer interval. Hence the adverse effects of the phenytoin depend on plasma concentration. In higher dose, zero order pharmacokinetics makes the half-life prolonged leading in to increased toxicity. In low dose toxicity produces hyperplasia of gums, hypersensitivity reactions, hirsutism, hyperglycemia, hydantoin syndrome, osteomalacia, megaloblastic anemia and peripheral neuropathy. In higher plasma concentrations it affects the central nervous system.[15]

The dermatological adverse effects are due to hypersensitivity reaction which is caused by toxic dose of the drug associated with aromatic anticonvulsants. Anticonvulsants are converted to reactive metabolites and induce cytochrome P450 3A which produce oxidative reactive

JMSCR Vol||08||Issue||02||Page 727-731||February 2020

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i2.125

Journal Of Medical Science And Clinical Research

Original Research Article

Association of Anti - TPO Antibodies with Thyroid Dysfunction

Authors
Dr Sibi Chakravarthy.C[1], Dr M. K. Uthaya Sankar[2*], Dr Hanush Raj[3], Dr Mythreini B.S[4]
[1,4]Postgraduate, [2]Professor, [3]Assistant Professor
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India
*Corresponding Author
Dr M.K. Uthaya Sankar

Abstract

Introduction: *Thyroid peroxidise (TPO) autoantibodies are a secondary response to thyroid injury and do not cause disease themselves. Though the presence of Anti TPO antibody may be a hallmark for autoimmune thyroid disease, there are reports that suggest the presence of Anti TPO antibodies can be a marker of thyroid dysfunction in future.*

Objective: *To assess the presence of Anti – TPO antibodies in patients with thyroid dysfunction.*

Materials and Methods: *This is a cross sectional study done on 60 Patients above the age of 18yrs attending General Medicine OPD with history of thyroid dysfunction and were subjected to thyroid function test and measurement of anti – TPO antibodies.*

Results: *Of the 60 patients 26 were found to be hypothyroidic, 15 were hyperthyroidic, FNAC of 7 patients suggested the presence of malignancy and 12 patients had Hashimoto's thyroiditis. A significant association was found between Anti TPO levels and trends of anaemia with a p value of 0.02. On assessing the association between thyroid function test and Anti TPO antibody level, a significant relation with a p value of 0.01 was found with trends of free T3 levels. Of the 7 patients under malignancy group, 5 patients (71.4%) who had papillary carcinoma thyroid had elevated Anti TPO antibody levels.*

Conclusion: *In presence of Anti TPO antibodies along with a thyroid swelling a direct diagnosis of autoimmune thyroiditis should not be made and an FNAC biopsy should always be performed to rule out the likely possibility of carcinoma thyroid.*

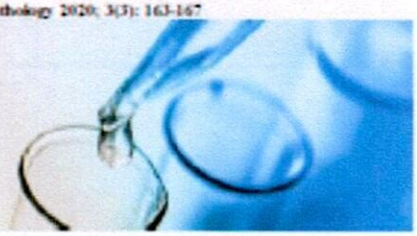
Introduction

Thyroid diseases are arguably, among the commonest endocrine disorders worldwide. India too, is no exception. According to a projection from various studies on thyroid disease, it has been estimated that about 42 million people in India suffer from thyroid diseases.[1]

Iodine deficiency, biosynthesis defect, autoimmune disease, neoplastic and nodular diseases can each lead to thyroid swelling or thyroid dysfunction although by different mechanism.[2]

Biosynthetic defects and iodine deficiency are associated with reduced efficiency of thyroid synthesis, leading to increased TSH, which stimulates thyroid growth as a compensatory mechanism to

International Journal of Clinical and Diagnostic Pathology



ISSN (P): 2617-7226
ISSN (E): 2617-7234
www.pathojournal.com
2020; 3(3): 163-167
Received: 16-05-2020
Accepted: 22-06-2020

Dr. Ramya Gandhi
Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry, India

Dr. Sriram V
Associate Professor, Department of Pathology Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet Puducherry, India

Dr. Jayanthi C
Associate Professor, Department of Pathology Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet Puducherry, India

Dr. Erli Amel Ivan
Professor & Head Department of Pathology Sri Manakula Vinayagar Medical College and Hospital Kalitheerthalkuppam, Madagadipet Puducherry, India

Corresponding Author:
Dr. Ramya Gandhi
Associate Professor, Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Puducherry, India

Histopathological patterns of ovarian lesions in various age groups-3 year study in a rural population

Dr. Ramya Gandhi, Dr. Sriram V, Dr. Jayanthi C and Dr. Erli Amel Ivan

DOI: https://doi.org/10.33545/pathol.2020.v3.i3c.275

Abstract
Introduction: Ovarian lesions are commonly encountered and are complex in gynecological practice which can be either benign, borderline or malignant which constitutes a high fatality rate and it cannot be categorized clinico - radiologically. Definite diagnosis is of great importance for therapeutic and prognostic purposes. Histopathology gives accurate diagnosis in most of the cases.
Aims: To study the histopathological pattern of ovarian lesions in different age group and also to analyse the associated clinical and radiological findings.
Methods: A retrospective study conducted on 69 cases of ovarian lesions reported from June 2016–May 2019 in pathology department at Sri Manakula Vinayagar medical college and hospital, Puducherry.
Results: Out of sixty nine ovarian lesions, 24 were non neoplastic and 45 were neoplastic lesions. Out of the neoplastic lesions 39 were benign and 6 were malignant. Among non-neoplastic lesions follicular cyst 12 was the most common lesion followed by endometriotic cysts 10. The majority of the cases were seen in the age group of 41-50 years.
Conclusion: Most ovarian lesions were common in the age group 20-50 years. Neoplastic ovarian lesions are more common than non-neoplastic lesion.

Keywords: ovarian lesion patterns, histopathology, ovarian neoplasms, surface epithelial tumor, malignancy

Introduction
Ovarian masses occur at all age groups and consist of both functional and pathological lesions. Most functional lesions like follicular cyst and corpus luteal cysts resolve spontaneously [1]. Pathological lesions of the ovary constitutes a complex area in gynecological practice which can be either benign, borderline or malignant which constitutes a high fatality rate [2]. The life time risk of ovarian cancer in a female range from 1.6% to 7% based on familial predisposition, which makes it as the most common cause of gynecological cancer related death and fourth most common cancer among females [3]. Bimanual examination is the clinical method of assessing a pelvic lesion. Even imaging modalities like Ultrasound, CT, MRI at instances may fail to delineate a benign from a malignant lesion [4]. Hence Histopathological examination of the resected specimen stands as a gold standard in categorizing the pathological ovarian lesion. Hence the present study was undertaken to evaluate the distribution of predominant histopathological patterns of ovarian lesions in various age groups and to assess the associated clinical and radiological findings.

Aims and Objectives
This study was aimed to find the histopathological pattern of ovarian lesions in different age group diagnosed in the pathology department of a tertiary care hospital over a 3 year period from June 2016-May 2019 and also to assess the associated clinical and radiological findings. We also aimed to compare our study findings with that of other studies in and out of the country.

Materials and Methods
It is a cross sectional study done for a period of 3 years from June 2016-May 2019 in the department of Pathology, in the patients undergone hysterectomy with bilateral salpingo oophorectomy for the ovarian lesions. This enabled us to study in detail the associated

IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 19, Issue 11 Ser.7 (November. 2020), PP 29-34
www.iosrjournals.org

Clinical profile of hypoglycemiain type 2 diabetes mellitus patients

Dr.Kailash.C[1], Dr.Badrinath.A.K[2], Dr.SureshBabu.S[3]

[1] *Post Graduate, Department of General Medicine, SMVMCH, Pondicherry.*
[2] *HOD and Professor, Department of General Medicine, SMVMCH, Pondicherry.*
[3] *Assistant Professor, Department of General Medicine, SMVMCH, Pondicherry.*

Date of Submission: 08-11-2020 Date of Acceptance: 21-11-2020

I Introduction

Currently, we are experiencing an epidemic growth in the number of people with diabetes worldwide.[1] An estimated 366 million people, corresponding to 8.3% of the world's adult population, have diabetes today, but the prevalence is expected to grow to 552 million by 2030, corresponding to 9.9% of the adult population.[2] This increase goes hand in hand with "westernization" of lifestyle, with consumption of more energy-dense food and decreasing physical activity.[2] Driven by this development, diabetes affects more and more young people. These changes have driven a huge increase in T2DM —the most common form of diabetes, particularly in young people, especially in their working age.[3] The medical burden is rising as patients with diabetes are developing a growing number of metabolic and cardiovascular comorbidities.[4] The growing economic burden in complex socioeconomic structures becomes obvious.[5] The continuation of the diabetes epidemic is predicted, and the World Economic Forum foresees the epidemic as a disaster likely to continue to worsen in the foreseeable future with a significant impact on global economic growth at least similar in scale to the recent banking crisis.[6] The glycosylated hemoglobin goal according to ADA guidelines is below 7.0% but should be individualized based on factors such as age and life expectancy, co-morbid conditions, and hypoglycemia unawareness.

Exercising during the evening hours increases the risk of nocturnal hypoglycemia, which may occur up to 4 to 6 hours after an exercise bout.[4] To decrease the likelihood of this response during the night (or day), the patient with diabetes may need to reduce his or her insulin dose or increase carbohydrate intake before or after exercise.[5] Recognize the signs and symptoms of hypoglycemia. These include heart palpitations, confusion, weakness, and visual disturbances. If hypoglycemia is left untreated, it could lead to unconsciousness or convulsions. To reduce the likelihood of complications, patients with diabetes should always carry a form of fast-acting carbohydrate (e.g., juice, candy, and glucose tablets), exercise with a partner, and wear a diabetes identification tag. Monitor for symptoms of hyperglycemia. These include excessive thirst, frequent urination, blurred vision, itchy, dry skin, and a fruity odor or breathe. Hyperglycemia can lead to diabetic coma.[6]

The pursuit of strict glucose control is frequently hampered by concerns over hypoglycemia. Hypoglycemia requiring third-party assistance is common in the course of type 2 diabetes therapy and occurs with a frequency of approximately 35 episodes per 100 patient-years among insulin-treated patients.[7] Hypoglycemia occurring during treatment has been associated with several adverse events, including increased mortality,[8,9] higher risk of dementia,[10] falls,[11,12] fall related fractures,[13] cardiovascular events,[14] and poor health-related quality of life.[15] In particular, the relationship between hypoglycemia and subsequent cardiac events warrants attention. There are a number of plausible mechanisms by which acute hypoglycemia may trigger ischemia, arrhythmia, and cardiovascular events.[16] Hypoglycemia increases the levels of counter regulatory hormones, such as epinephrine and norepinephrine, which may induce increased cardiac rate and/ or contractility, heightening myocardial oxygen consumption, while also precipitating vasoconstriction and platelet aggregation.[16] Acute hypoglycemia in the presence of hypokalemia prolongs cardiac repolarization, increases the QT interval, favoring a proarrhythmic state. One study of type 1 and type 2 diabetic patients who presented to the hospital with severe hypoglycemia documented frequent hypokalemia, QT prolongation, and severe hypertension during the hypoglycemic events.[17]

Type 2 diabetes mellitus patients between age group 30-65 years admitted as in patients in SMVMCH with other associated factors are assessed for their hypoglycemic episodes and the frequency of hypoglycemia are correlated with other parameters. This study is mainly done in the view of "Hyperglycemia is a serious problem, Hypoglycemia is a fatal condition".

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Case Report

Stuck Mitral Valve Thrombosis Presenting as Embolic Stroke Following Thrombolysis- A Case Report

Uthaya Sankar M. K[1], Rangarajan D.V[2], Louis Ferdin Zeno. J[3]

[1]Professor and Unit Chief, [2,3]Postgraduate residents,
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India

Corresponding Author: Uthaya Sankar M. K

ABSTRACT

Prosthetic valve thrombosis is one of the major causes of primary valve failure, which can be life-threatening. Although surgery is the first-line treatment modality in symptomatic Prosthetic valve thrombosis, thrombolytic therapy has recently evolved as an effective substitute to surgery. Cerebral embolism can occur in 5-6% of left sided valve thrombus and this is a case of Prosthetic mitral valve thrombosis presenting as acute ischaemic stroke after Thrombolysis due to Thromboembolism.

Keywords: Prosthetic valve Thrombosis, Thrombo-embolism, Acute Ischaemic Stroke

INTRODUCTION

Prosthetic valve thrombosis (PVT) is a rare but serious complication of valve replacement, most often encountered with Mechanical prosthesis.[2] PVT is an obstruction of a prosthesis by noninfective thrombotic material. The most common cause of PVT is inadequate anticoagulant therapy. Unfortunately, vitamin K antagonists are still the only approved oral anticoagulants in patients with heart valve prostheses. Even with the use of Vitamin K Antagonists, the risk of thromboembolism is 1%–2% per year, but the risk is considerably higher without or inadequate treatment with warfarin.[3] Significant morbidity and mortality associated with this condition warrants rapid diagnostic tests. The different therapeutic modalities available for Prosthetic Valve Thrombosis (Heparin treatment, fibrinolysis, surgery) will be largely influenced by the presence of valvular obstruction, by valve location (Left- or right-sided), and by clinical status.[2]

CASE REPORT

This is a case of 23 years old female who is a K/C/O Mitral valve prolapse for which Mitral valve replacement (St. Jude's valve) done, 4 years ago, presented with chief complaints of difficulty in breathing for 3 days, Class III-IV NYHA, with orthopnea and history of cough with Expectoration. No history of fever, chest pain, limb swelling present. She was on irregular Oral anticoagulation medications. No other comorbidities. General examination was normal. Vitals - Pulse Rate- 110 bpm, BP- 80/50mmHg, RR- 32/min, SPO2- 92% at Room Air. Cardiovascular system examination - S1, S2 heard and Valve click not heard in mitral area. Respiratory system examination revealed Fine end Inspiratory Crepitations in Bilateral Infra-Axillary and Infra-Scapular areas. Central nervous System revealed No Focal Neurological deficit. Abdomen examination – Soft, non-tender, No organomegaly.

Investigations showed PT INR value of 1.5. Chest X-ray revealed Cardiomegaly with ill defined homogenous opacities present in Bilateral lung fields(fig1-thin

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Case Report

Hodgkin's Lymphoma Presenting as Paraplegia: A Case Report

Uthaya Sankar M.K[1], Sivaram A[2], Louis Ferdin Zeno.J[3], Suman Babu.I.S.S[4]

[1]Professor and Unit chief, [2,3]Postgraduate residents, [4]Assistant Professor, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India

Corresponding Author: Sivaram A

ABSTRACT

Hodgkin's lymphoma is a malignancy of mature B lymphocytes which has Bimodal distribution of age at diagnosis and presents as palpable, non-tender lymphadenopathy. Neurological manifestations are rare complication of Hodgkin's disease (0.2%) and this is a case of Hodgkin's lymphoma which presented primarily with paraplegia as a neurological deficit caused by spinal cord compression.

Keywords: Hodgkin's lymphoma, paraplegia, neurological deficit.

INTRODUCTION

Hodgkin's lymphoma (HL) is a malignancy of mature B lymphocytes and represents 10% of all lymphomas diagnosed each year. The majority of HL diagnosis is classical HL (cHL). A bimodal distribution of age at diagnosis has been observed, with one peak incidence occurring in patients in their twenties and the other in those in their eighties. Most patients with cHL presents with palpable lymphadenopathy that is non-tender in most of the patients, these lymph nodes are in neck, supraclavicular area and axilla. More than half of the patients will have mediastinal adenopathy at diagnosis, and this is sometimes the initial manifestation. Subdiaphragmatic presentation of cHL is unusual and more common in older males.[1]

HL is predominantly a disease of the lymph nodes although extranodal sites of disease may be present in 10% of cases. Direct neurologic dysfunction results from intracranial metastases, metastases to the epidural space of the spinal cord with resultant spinal cord or nerve root compression, metastatic leptomeningeal disease, and intramedullary spinal cord metastases.[2]

CASE REPORT

This is a case of a 46 year old male who was apparently healthy 6 month back and then he developed low back ache which was dragging type, intermittent, aggravated on prolonged standing and relieved by taking rest. Then he developed difficulty in walking , initially he had difficulty in using left leg for walking ,climbing stairs ,getting up from squatting position which gradually involved right leg also in a duration of one month. Patient had no involvement of upper limb. The symptoms worsened in next 10 days after which he had decreased sensation of both the lower limb and became completely bedridden. History of walking over cotton wool like sensation present. History of band like sensation around the hip was present. On examinations positive finding were multiple cervical non-tender and non matted lymphadenopathy, bilateral decreased of lower limb with power grading of 0/5, absent abdominal and cremasteric reflex and bilateral extensor Babinski response. The crude touch, pain and temperature where decreased below the level of umbilicus, and absent sensation in perianal region and tenderness over spine in thoracolumbar region.

Case Report

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

A Deviant Manifestation of Sarcoidosis: Bilateral Inguinal Lymphadenopathy

Uthaya Sankar M K[1], Swapna U S[2], Sivaram A[3], Mythreini B S[4]

[1]Professor, [2,3,4]Post graduate residents, Department of General Medicine,
Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107.

Corresponding Author: Swapna U S

ABSTRACT

Background: Sarcoidosis is a systemic granulomatous disorder, characterized by involvement of multisystem, frequently involves pulmonary system. Sarcoidosis can have varied presentations. The clinical presentation of sarcoidosis ranges from asymptomatic to organ failure. It is unclear how often sarcoidosis is asymptomatic. Lymph node involvement is found rarely in isolation.

Case Report: A 63-year-old asymptomatic male presented with bilateral pelvic and inguinal lymphadenopathy. An ultrasonogram scan of the abdomen, and pelvis revealed bilateral deep pelvic and inguinal bulky lymphadenopathy. Excision biopsy revealed sarcoidosis. He responded to six months of oral steroid treatment.

Conclusion: This case illustrates the different presentation of sarcoidosis and the difficulty in diagnosing sarcoidosis in its initial stages. A high suspicion and excision biopsy is the key in diagnosing this condition.

Keywords: Sarcoidosis, Lymph nodes, Biopsy

INTRODUCTION

Sarcoidosis is a global disease of unknown etiology. It is an inflammatory disease characterized by the presence of non caseating granuloma with varied presentations thus leading to confusion whether asyuptomatic individuals with suspected diagnosis of sarcoidosis should be investigated further. This disease is often multisystem and requires the presence of involvement in two or more organs for the specific diagnosis[1]. The clinical presentation of sarcoidosis varies from asymptomatic to complicated sarcoidosis. Respiratory involvement (> 90 %) is most common[1], but it is non specific in nature with non specific constitutional symptoms. Typical pulmonary manifestations are easily identified.

The typical manifestations of this disease include bilateral hilar lymphadenopathy and pulmonary reticular opacities[2]. The clinical presentation of sarcoidosis depends as age, sex, and race, the duration of the disease and the sites of involvement. Frequency of common organ involvement is lung (90%), skin (24%), eye (12%), extra thoracic lymphnode (15%), liver (12%), Spleen (7%), neurological (5%), cardiac (2%) with Constitutional symptoms like fatigue, fever, night sweats and weight loss[1]. Diagnosis of asymptomatic presentations in sarcoidosis remains a challenge as it can influence prognosis.

CASE REPORT

A 63 year old male presented with swelling over the bilateral inguinal region since 3 months, multiple in number and was non tender, non discharging .History of yellowish discolouration of urine for 7 days, 2 months back. For which patient took native treatment. History of generalized fatiguability and weight loss present. Besides he was a smoker and quitted smoking 3 years back.

The vital signs were stable. In physical examination three non tender

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

A Study of Effect of Anemia over HbA1C Level in Non-Diabetic Patients in a Tertiary Care Hospital in Puducherry

Uthaya Sankar M.K[1], Sivaram A[2], Louis Ferdin Zeno.J[3], Asmathulla.S[4]

[1]Professor and Unit Chief of Medicine, [2,3]Postgraduate residents, [4]Professor of Biochemistry, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry 605107, India

Corresponding Author: Sivaram A

ABSTRACT

HbA1c assay is as an accurate and precise measure of chronic glycemic levels as it correlates well with the risk of diabetes complications for the same reason it is recommended to rely on HbA1c for diagnosing diabetes. [2] Falsely elevated HbA1c concentrations are encountered when there is increased circulating erythrocyte life span (decreased red cell clearance) or impaired reticulocyte production. [3] Anemia is most common factor in Indian population affecting the level of HbA1C. Therefore it's necessary to know whether anemia due to any etiology will affect the level of HbA1C level in non-diabetic patients.

Keywords: Anemia, HbA1C

INTRODUCTION

Hemoglobin A1C (HbA1c) is the predominant hemoglobin found in HbA1 fractions and it constitutes 5% of the total hemoglobin in normal adults and up to 15% in patients with diabetes mellitus [1]. Hgb A to HbA1c conversion takes place during the entire life span of the red blood cell and the rate of this reaction is faster in diabetics because of the higher prevailing glucose concentration, resulting in a higher concentration of HbA1c. Red blood cells (RBC) are freely permeable to the plasma glucose molecules, and hemoglobin is practically exposed to the same glucose concentrations as plasma. Therefore, HbA1c level is directly proportional to average blood glucose concentration over the previous 4weeks to 3 months or the average lifespan of the erythrocyte.

There are a number of methods available to estimate glycated hemoglobin like immunoturbidimetry, ion exchange high-performance liquid chromatography (HPLC), boronate affinity, and enzymatic method. HbA1c assay is as an accurate and precise measure of chronic glycemic levels as it correlates well with the risk of diabetes complications for the same reason it is recommended to rely on HbA1c for diagnosing diabetes [2]. Despite its benefit, HbA1c is affected by a variety of genetic, physiological, hematological and illness related factors.

Falsely elevated HbA1c concentrations are encountered when there is increased circulating erythrocyte life span (decreased red cell clearance) or impaired reticulocyte production [3]. Out of these factors affecting the level of HbA1C , most common entity in Indian population is anemia out of which most common type iron deficiency anemia has showed impact in HbA1C value in non diabetic individuals [4].

Therefore it's necessary to know whether anemia due to any etiology will affect the level of HbA1C level in non-diabetic patients for whom accurate analysis of glycemic status is necessary. So this study was done to estimate the HbA1C level

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

The Study of Serum Gamma Glutamyl Transferase Level in Patients with Metabolic Syndrome

Uthaya Sankar M K*, Nagabhushan.D, Louis Ferdin Zeno.J***, Gayathri****

*Professor, **Assistant Professor, ***Post Graduate,
Department of General Medicine, Sri Manakula Vinayagar Medical College & Hospital, Pondicherry-605107

Corresponding Author: Nagabhushan.D

ABSTRACT

Gamma Glutamyl Transferase (GGT) belongs to Transferase enzymes. It is used as a diagnostic marker for liver disease.[1] Gamma Glutamyl Transferase was found to elevated in Metabolic Syndrome patients along with mildly elevated liver enzymes to the upper limit. The aim is to study the level of Serum Gamma Glutamyl Transferase in Metabolic Syndrome patients and to analyse for any association between serum GGT levels and parameters of Metabolic Syndrome. The study population is of 114 who are diagnosed as Metabolic Syndrome. Waist circumference, Body Mass Index (BMI), blood pressure, lipid profile, liver function test, fasting blood glucose of the subjects were recorded. Mean serum Gamma Glutamyl Transferase was 92.7 ± 52.5. An elevated GGT was found to be associated with Metabolic Syndrome subjects. Also there was a positive correlation between GGT and waist Circumference, triglycerides, erythrocyte sedimentation rate, liver function test.

Key words: Gamma Glutamyl Transferase, metabolic syndrome, waist circumference, triglycerides.

INTRODUCTION

The Metabolic Syndrome is a group of metabolic abnormalities that confers increased risk of cardiovascular diseases and diabetes mellitus[1]. The major features of the metabolic syndrome include central obesity, hypertriglyceridemia, low high-density lipoprotein cholesterol, hyperglycemia, and hypertension.[1] The raise in the prevalence of obesity in India is threatening to increase the burden of Atherosclerotic cardiovascular disease (ASCVD).

The prevalence of metabolic syndrome worldwide is 20-25%.[2,3] There has been a consistent effort to evaluate biochemical markers to predict an early onset of Metabolic Syndrome and subsequently intervene appropriately by means of lifestyle changes and drug therapy and thereby reduce cardiovascular morbidity and mortality. Studies are lacking in the adult Indian population.

Markers like adiponectin have been studied as a measure of increased adipose but have not proven to be cost effective and easily available. Clearly a cost effective and easily available marker is required to predict an early onset of this syndrome. Gamma Glutamyl Transferase (GGT) is one such marker which is cost effective, easily available[3] High levels of GGT have been associated in populations with increased risk of Atherosclerotic cardiovascular diseases (ASCVD) [2,5]. Several prospective studies reported that baseline serum GGT concentration was an independent risk factor for the development of coronary artery disease (CAD), diabetes mellitus, stroke and hypertension[7] The purpose of this study is to evaluate the utility of GGT as an early marker in Metabolic Syndrome.

Objective

1. To study the level of Serum Gamma Glutamyl Transferase in Metabolic Syndrome patients.

International Journal of Research and Review
Vol.7; Issue: 11; November 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

A Clinical Profile of Stroke in Tertiary Care Centre

Uthaya Sankar M K*, Mythreini Satheesh, Louis Ferdin Zeno.J**, Suman Babu.I.S.S.****

*Professor,***Assistant professor,**Post graduate,
Department of General Medicine, Sri Manakula Vinayagar Medical College & Hospital, Pondicherry-605107

Corresponding Author: Mythreini Satheesh

ABSTRACT

Background: Cerebrovascular disease (CVD) is the third leading cause of death after heart disease and cancer in developed countries and is now emerging as the commonest preventable life-threatening neurological problem worldwide. It makes an important contribution to morbidity and mortality in developed as well as developing countries.

Aims: 1.To determine the age, gender distribution, risk factors and pattern of areas of brain affected in stroke patients in tertiary care centre.

Methodology: 50 patients with acute stroke were selected based on inclusion and exclusion criteria. After getting consent from the patient appropriate questionnaire was used to collect the data of patients. Diagnosis of stroke was confirmed by CT or MRI scan of brain.

Results: Totally 50 patients of acute stroke were included in our study, majority of the patients are males 35 (70%), and females are 15(30%). Approximately 36% were in the age group of 51-60 years. In this study ischemic stroke was seen in 45 (90%) of the patients and 5 (10%) had hemorrhagic stroke. Out of 50 patients 23 (46%) had diabetes mellitus and 26 (54%) had hypertension. Heart disease was present only in 16% of the patients. The mean duration of both diabetes and hypertension were 5 years. In this study 38% of the patients had high triglycerides, and 30% had had high VLDL. Anterior circulation stroke was more common 74% than posterior circulation and lacunar stroke.

Conclusion: In this present study stroke was more common in the age group of 51-60 years with male are most commonly affected. Dyslipidemia in the form of high triglycerides and high VLDL levels was the most common risk factor which was followed by hypertension. Most of the patients presented as ischemic stroke. Anterior circulation stroke was more common than posterior circulation stroke.

Keywords: Cerebrovascular accident, Stroke profile

INTRODUCTION

The word "stroke" was first introduced into the medicine by William core in 1689 before this non-traumatic brain injury was called as apoplexy[4]. Stroke or CVA, by WHO definition is a "rapidly developing clinical symptoms and/or signs of focal neurological deficit and at times global loss of cerebral function (coma) lasting longer than 24 hrs or leading to death with no apparent cause other than vascular origin"[5]. TIA(Transient ischemic attack) "defined as symptoms and signs which resolves within 24 hours without evidence of brain infarction on brain imaging"[5]. Stroke is due to cerebral infarction, primary intracerebral haemorrhage (PICH), intraventricular haemorrhage (IVH), and subarachnoid haemorrhage (SAH), it excludes infarction caused by infection, tumour, subdural haemorrhage, and other intracranial haemorrhage. Among all strokes 80% is due to ischemic and remaining 20% being the haemorrhagic stroke. Ischemic stroke is due to decreased blood supply to the focal area of brain due to infarction. Haemorrhagic stroke is the leakage of blood in the closed cavity is due to trauma and hypertension.[6] Stroke is an emerging important health problem in our society. After Acute Myocardial Infarction (MI) and

International Journal of Research and Review
Vol.7; Issue: 10; October 2020
Website: www.ijrrjournal.com
Original Research Article *E-ISSN: 2349-9788; P-ISSN: 2454-2237*

Association of Platelet Count/Spleen Size Ratio in Relation with Grades of Esophageal Varices and Severity of Chronic Liver Disease

Uthaya Sankar M.K[1], Naveen Sathish.V[2], Mythreini Satheesh[3], Thirumal.P[4]

[1]Professor, [2,3]Post Graduate Resident, [4]Assistant Professor,
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Corresponding Author: Naveen Sathish.V

ABSTRACT

Background: Most serious complication of portal hypertension in patients with liver diseases is esophageal varices. This study was conducted to evaluate non-invasive predictors of large esophageal varices in comparison with small or absent varices in patient with cirrhosis.

Objective: To assess the association of platelet count/spleen size ratio in relation with severity of varices and to compare with Child Pugh's score of chronic liver disease.

Methodology: A Hospital based cross section study was conducted in Department of General Medicine and Gastroenterology. The study population is of 90 who were diagnosed to have chronic liver disease based of ultrasonogram and biochemical test.

Results: Incidence of large varices was seen in 34.4%. Onmultivariate analysis, only spleen diameter is independent predictors for the presence of large varices with mean size of 14.2cm. The sensitivity of PC/SD Ratio of ≤ 909 in predicting presence of esophageal varices in our study was 61.29 and specificity was 61.02%. However, the mean PC/SD to predict the large esophageal varices in our study was ≤ 962.3 and small and absent varices was 1172.7. Although there is significant reduction in PC/SD ratio between the two groups it was not statistically significant.

Conclusion: From our study we conclude that presence of splenomegaly and lower PC/SD ratio determine the presence of higher grades of varices and can hence identify the patients who require endoscopy for the prophylactic management of esophageal varices.

Key words: platelet count/spleen size ratio, esophageal varices, Child Pugh's score, chronic liver disease

INTRODUCTION

Portal hypertension is the most common and deadly complication of chronic liver disease.[1] As the consequence, Gastro esophageal varices, ascites, hepatic encephalopathy, hepatorenal syndrome, hepatopulmonary syndrome and hypersplenism can develop. Portal hypertension is associated with increase in hepatic venous pressure gradient to >5mmHg and is considered as the major complication of cirrhosis. Serious complication of portal hypertension is variceal bleed which is associated with high mortality. 60-80% of cirrhotic liver patients has varices with 25-35% of bleeding risk.[2]

The best way to detect varices is endoscopic evaluation of upper GI system. However, inconvenience, patient intolerance, contraindication, cost and lack of equipment justifies the need for development of noninvasive methods. Noninvasive method among them is platelet count/spleen diameter ratio which showed high sensitivity for prediction of large varices.[3] Overall, large spleen size, low platelet count, or their combination (platelet count to spleen diameter ratio), fibro scan, portal vein size or presence of collaterals on ultrasound, hypersplenism and Child Pugh

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

Prevalence of Spontaneous Ascitic Fluid Infection and its Microbiological Profile in Decompensated Cirrhotic Liver Disease Patients in a Tertiary Health Care Hospital in Puducherry

M. K. Uthaya Sankar[1], Swapna U. S[2], Mythreini[3], R. Gopal[4]

[1]Professor of Medicine, [2,3]PG Resident, [4]Professor of Microbiology;
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Corresponding Author: Swapna U S

ABSTRACT

Background: Spontaneous ascitic fluid infection (SAI) is common in cirrhotic patients. Third-generation cephalosporins are currently recommended as first-line therapy. We conducted a study to determine bacterial etiology, susceptibility patterns.

Objective: To estimate the prevalence of spontaneous ascitic fluid infection in cirrhotic decompensated liver disease patients, and to analyse microbiological profile in cirrhotic ascites.

Method: We prospectively collected clinical data and laboratory values. Diagnostic paracentesis was performed in all patients of decompensated cirrhotic liver disease with ascites to investigate the presence of SAI.

Result: Among total 45 patients the leading cause of cirrhosis was alcohol consumption. SAI was diagnosed in 27 patients (60%). Of these, 19 patients (70 %) had culture negative neutrocytic ascites (CNNA), 5 (18.5%) had Spontaneous bacterial peritonitis (SBP), and 3 (11.1%) had mono microbial non neutrocytic bacterascites (MNB). CNNA and SBP did not differ in terms of clinical characteristics. Organisms found are - two Streptococci and two coagulase negative staphylococci, two E. coli, one klebsiella pneumonia, one candida growth. Gram positive cocci (50%) were predominant among culture positive SAI, gram negative bacilli (37.5%), fungus (12.5%). Among the commonly used antibiotics higher resistance rate was found with cephalosporins (71.4%) and most sensitive antibiotics found to be carbapenems, linezolid, vancomycin (85%), then amino glycosides and tetracycline (71%)

Keywords: SAI, Ascitic fluid culture, Antibiotic sensitivity

I. INTRODUCTION

Spontaneous ascitic fluid infection (SAI) is common in cirrhotic patients leading to significant mortality and morbidity. Spontaneous ascitic fluid infection (SAI) has three subtypes ;SBP (spontaneous bacterial peritonitis) is established by an elevated ascitic fluid polymorphonuclear leukocyte (PMNL) count >250 cells/mm3 and a positive ascitic fluid bacterial culture ;Culture-negative neutrocytic ascites (CNNA), which is considered to be a variant of SBP, is diagnosed by elevated ascitic fluid PMNL count >250 cells/mm3 with a negative ascitic fluid culture; diagnosis of mono microbial non-neutrocytic bacterascites (MNB) include a positive ascitic fluid culture for a single organism and ascitic fluid PMNL count <250 cells/mm3.[1]

Spontaneous bacterial peritonitis (SBP) is a frequent and severe complication in cirrhotic patients with ascites and its prevalence ranges from 10% to 25% in hospitalized cirrhotic patients .SBP is the most frequent bacterial infection in cirrhotic patients, followed by urinary tract infection, pneumonia, skin and soft tissue infections,

International Journal of Research and Review
Vol.7; Issue: 10; October 2020
Website: www.ijrrjournal.com
Original Research Article *E-ISSN: 2349-9788; P-ISSN: 2454-2237*

Prevalence of Cirrhotic Cardiomyopathy and Correlation with Child-Pugh Score

Uthaya Sankar M.K[1], Sibi Chakravarthy C.[2], Louis Ferdin Zeno J.[3], Thirumal P[4]

[1]Professor, [2,3]Post graduate resident, [4]Assistant Professor
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Corresponding Author: Sibi Chakravarthy C.

ABSTRACT

Background: The deterioration of cardiac function in patients with liver cirrhosis has been a great debate for past two decades. A newer entity called "Cirrhotic Cardiomyopathy" has been described which includes a variety of features like QT prolongation, systolic and diastolic dysfunction. This is of extreme importance since cardiac function plays a major role in mortality and morbidity of the patient.

Aim: To assess the prevalence of cirrhotic cardiomyopathy and to assess its correlation with Child Pugh score.

Methodology: A hospital based cross sectional study was conducted in department of general medicine and department of gastroenterology. The study period was one and a half years after obtaining approval from the ethical committee. The study population was 93 and the patients admitted in general medicine and gastroenterology were enrolled for the study.

Results: 44.4% patients were in age group 31-45, 69% had abdominal distension as chief complaint, 77.4% patients were alcoholics, 61.3% of patients had features of liver cell failure and 54.8% were in hepatic encephalopathy. 45.2% patients were under Child B and 45.2% under Child C. 77% of patients had features of cirrhotic cardiomyopathy of which 49.9% were child C. 56% patients had diastolic dysfunction. Systolic dysfunction was found in 30.1% patient which had a statistical significance of 0.02. While comparing with Child Pugh score diastolic dysfunction was significant with a p value of 0.035 considering the variables taken in the study Albumin and INR values were statistically significant with a p value of 0.038 and 0.043 respectively.

Conclusion: Our study showed a staggering rise in the presence of cirrhotic cardiomyopathy in patients with end stage liver disease when compared to previous studies. Presence of systolic dysfunction was statistically significant, whereas on correlating with Child Pugh score only diastolic dysfunction was significant.

Keywords: cirrhotic cardiomyopathy, liver cirrhosis, Child Pugh score

INTRODUCTION

Chronic liver disease is a pathological entity which is associated with a spectrum of clinical manifestations. Cirrhosis is the end result of all chronic liver disease. Interactions between the functions of the heart and the liver have been described, with liver diseases affecting the heart, heart diseases affecting the liver, and conditions that simultaneously affect both. Results of experimental and clinical studies have shown impaired myocardial contractility as well as electrophysiological abnormalities in patients with cirrhosis[1]. Alcohol being one of the most common causes of liver cirrhosis can itself cause cardiomyopathy, which is termed as "Alcoholic cardiomyopathy". These abnormalities were initially thought to be a manifestation of alcoholic cardiomyopathy. But in the mid 1980's, studies in nonalcoholic patients and in experimental animal models showed a similar pattern of

International Journal of Research and Review
Vol.7; Issue: 12; December 2020
Website: www.ijrrjournal.com
E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

Prevalence of Spontaneous Ascitic Fluid Infection and its Microbiological Profile in Decompensated Cirrhotic Liver Disease Patients in a Tertiary Health Care Hospital in Puducherry

M. K. Uthaya Sankar[1], Swapna U. S[2], Mythreini[3], R. Gopal[4]

[1]Professor of Medicine, [2,3]PG Resident, [4]Professor of Microbiology,
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Corresponding Author: Swapna U S

ABSTRACT

Background: Spontaneous ascitic fluid infection (SAI) is common in cirrhotic patients. Third-generation cephalosporins are currently recommended as first-line therapy. We conducted a study to determine bacterial etiology, susceptibility patterns.

Objective: To estimate the prevalence of spontaneous ascitic fluid infection in cirrhotic decompensated liver disease patients, and to analyse microbiological profile in cirrhotic ascites.

Method: We prospectively collected clinical data and laboratory values. Diagnostic paracentesis was performed in all patients of decompensated cirrhotic liver disease with ascites to investigate the presence of SAI.

Result: Among total 45 patients the leading cause of cirrhosis was alcohol consumption. SAI was diagnosed in 27 patients (60%). Of these, 19 patients (70 %) had culture negative neutrocytic ascites (CNNA), 5 (18.5%) had Spontaneous bacterial peritonitis (SBP), and 3 (11.1%) had mono microbial non neutrocytic bacterascites (MNB). CNNA and SBP did not differ in terms of clinical characteristics. Organisms found are - two Streptococci and two coagulase negative staphylococci, two E. coli, one klebsiella pneumonia, one candida growth. Gram positive cocci (50%) were predominant among culture positive SAI, gram negative bacilli (37.5%), fungus (12.5%). Among the commonly used antibiotics higher resistance rate was found with cephalosporins (71.4%) and most sensitive antibiotics found to be carbapenems, linezolid, vancomycin (85%), then amino glycosides and tetracycline (71%)

Keywords: SAI, Ascitic fluid culture, Antibiotic sensitivity

I. INTRODUCTION

Spontaneous ascitic fluid infection (SAI) is common in cirrhotic patients leading to significant mortality and morbidity. Spontaneous ascitic fluid infection (SAI) has three subtypes ;SBP (spontaneous bacterial peritonitis) is established by an elevated ascitic fluid polymorphonuclear leukocyte (PMNL) count >250 cells/mm3 and a positive ascitic fluid bacterial culture ;Culture-negative neutrocytic ascites (CNNA), which is considered to be a variant of SBP, is diagnosed by elevated ascitic fluid PMNL count >250 cells/mm3 with a negative ascitic fluid culture; diagnosis of mono microbial non-neutrocytic bacterascites (MNB) include a positive ascitic fluid culture for a single organism and ascitic fluid PMNL count <250 cells/mm3.[1]

Spontaneous bacterial peritonitis (SBP) is a frequent and severe complication in cirrhotic patients with ascites and its prevalence ranges from 10% to 25% in hospitalized cirrhotic patients .SBP is the most frequent bacterial infection in cirrhotic patients, followed by urinary tract infection, pneumonia, skin and soft tissue infections.

An Interesting Case of Bilateral Upper Limb Wasting: Hirayama Disease

Priscilla Rubavathy Eugin[1] Manokaran Chinnusamy[1] Sathiyanarayanan Janakiraman[1]

[1]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MBBS, MD, Department of General Medicine, 9, Associate Professor Quarters, Sri Manakula Vinayagar Medical College and Hospital Campus, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci NU 2021;11:40–43

Abstract

Hirayama disease is a rare neurologic disease and is characterized by insidious unilateral or bilateral muscular atrophy and weakness of the forearms and hands without sensory or pyramidal signs. Our patient presented with bilateral upper limb wasting, which is a rarer variant of motor neuron disease. The diagnosis of Hirayama disease is based on dynamic magnetic resonance imaging (MRI). This case displays how dynamic cervical spine MRI can pick up dynamic cord compression and contributes to zero in the diagnosis of Hirayama disease.

Keywords
- Hirayama disease
- dynamic MRI
- motor neuron disease

Introduction

Hirayama disease is a rare neurological disease and is characterized by insidious unilateral or bilateral muscular atrophy and weakness of the forearms and hands without sensory or pyramidal signs. The disease primarily affects men in the second or third decades of life. The disease progresses initially, but spontaneous arrest is known to follow several years after the onset.

Case Report

History and Examination

A 20-year-old male presented with complaints of insidious onset symmetric weakness of hands due to lifting heavy objects for 7 months. It progressed to reduced dexterity, with difficulty in mixing food, buttoning of clothes, and combing hair. Furthermore, he noted wasting of muscles and clawing of fingers for last the 4 months (→ Fig. 1). There was no history suggestive of involvement of higher mental function, cranial nerves, lower limbs, bowel and bladder, or sensory system. There were also no other known comorbidities.

On examination, the patient had weakness involving both hands, with a handgrip of 60% and impaired abduction and adduction of the digits and opposition of the thumb, with wasting and fasciculation. All other reflexes were normal. Powers of arm and forearm muscles were normal. Sensations were intact. There was no evidence of involvement of the pyramidal, spinothalamic, posterior column lesions, polyminimyoclonus, or autonomic disturbances. The patient was provisionally diagnosed with bilateral upper limb distal wasting under evaluation, and work-up for cervical spine pathology, predominant motor neuropathy, and distal myopathy was considered along with possibility of motor neuron disease (MND) variant.

Investigation

- Blood investigations such as complete blood count, sedimentation rate, and renal, liver, and thyroid function tests were within normal limits, including creatine phosphokinase levels.
- Magnetic resonance imaging (MRI) cervical spine: loss of cervical lordosis. In the neutral position, there is asymmetrical focal cervical cord flattening noted from C5–C7. On flexion MRI, there is anterior displacement of the cervical cord, with cord and spinal canal compression noted from C5 to C7 level (→ Fig. 2). Anterior shift of the posterior dura with T2-weighted image (T2WI) and short tau inversion recovery (STIR) (→ Fig. 3) hyperintense collection is noted in the epidural space for an approximate length of 12 cm with a maximum thickness of 8 mm with few curvilinear large T2WI flow voids noted within, representing epidural venous engorgement (→ Fig. 4).

published online
October 16, 2020

DOI https://doi.org/10.1055/s-0040-1718237
ISSN 2582-4287.

Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

Drug-Induced Lupus Erythematosus Associated with Proton Pump Inhibitor

Manokaran Chinnusamy[1] Ram Arvind Viswanathan[1] Sathiyanarayanan Janakiraman[1] Roshna Elayidath[1]

[1] Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MD, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, 9, Associate Professor Quarters, SMVMC Campus, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci [NS] 2020;10:132–134

Abstract

Drug-induced lupus erythematosus is an autoimmune phenomenon where the drug exposure leads to the development of systemic lupus erythematous like clinical features. Drug-induced lupus erythematosus can be divided into systemic lupus erythematous, subacute cutaneous lupus erythematous, and chronic cutaneous lupus erythematous. Here, we report a case of a 29-year-old female presented with systemic lupus erythematous due to chronic use of proton pump inhibitors, which is considered to be very rare.

Keywords
- drug-induced lupus
- pantoprazole
- proton pump inhibitors

Introduction

Drug-induced lupus erythematosus (DLE) is a rare adverse reaction to a large variety of drugs with features resembling those of idiopathic systemic lupus erythematosus (SLE). It comprises up to 10% of new lupus cases annually.[1] The first case described in 1965 was associated with treatment with sulfadiazine,[2] since then more than 90 drugs have been related to DLE and the number is continuously increasing. Recently proton pump inhibitors (PPIs) have been found to be associated with DLE.[3] The presentation is vague and needs a high index of suspicion resulting in a costly workup. Given that the prognosis is usually good if therapy with offending drug is stopped, it is important to identify this clinical entity promptly.

Case Report

A 29-year-old female patient was admitted to our department with 2 months history of pain in small joints of both upper limb, multiple skin lesions, and painless ulcers on oral cavity. On examination, prominent annular nonscarring erythema was present on the thigh, knees (► **Fig. 1**), and extensor surface of elbow (► **Fig. 2**). No other abnormalities were found on physical examination except for tenderness in the metacarpophalangeal joints of bilateral upper limbs and a painless ulcer over the palate (► **Fig. 3**). Routine investigations were conducted, including a complete blood count, renal function test, urine examination. Since she is a young female in the early reproductive age group, she was screened for connective tissue disorders. The laboratory investigations revealed normal hemogram, liver and kidney function test, and serum electrolytes. Rheumatoid factor was negative. Antinuclear antibody (ANA), antihistone antibody, and anti-dsDNA were positive. Above findings along with lack of systemic involvement raised the suspicion of drug-induced SLE; on further probing of history, we found that she was using pantoprazole tablet for the past 6 months for gastroesophageal reflux disease before her skin lesions appeared. She had no other concomitant diseases and did not take any other drug. She was diagnosed to have drug-induced SLE. The drug was discontinued and tab. hydroxychloroquine 200 mg twice daily and prednisone 0.5 mg/kg/day was started. The therapy was continued for 4 weeks and then the corticosteroid dose was tapered. Complete clearance of skin lesions was noted within 4 weeks of the treatment even the pain over the joints and oral ulcers had healed

Discussion

DLE is a lupus-like syndrome temporally related to continuous drug exposure that resolves upon drug discontinuation. There are currently no standard diagnostic criteria for DLE. Findings include skin manifestations, arthritis, serositis, antinuclear, and antihistone antibodies positivity.[1] Similarly to

published online
September 6, 2020

DOI https://doi.org/10.1055/s-0040-1716601
ISSN 2582-4287.

Icle published online: 2020-12-30

A Rare Case of Myocardial Infarction with Nonobstructive Coronary Arteries Due to Hereditary Thrombophilia

Ramesh Bala Arivazhagan[1] Manokaran Chinnusamy[1] Ashida Thulaseedharan Sarojadevi[2] Sathiyanarayanan Janakiraman[1]

[1]Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Pondicherry, India
[2]Department of Cardiology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagadipet, Pondicherry, India

Address for correspondence Manokaran Chinnusamy, MBBS, MD, Department of General Medicine, 9, Associate Professor Quarters, Sri Manakula Vinayagar Medical College and Hospital Campus, Kalitheerthalkuppam, Madagadipet, Pondicherry 605107, India (e-mail: manokaran.smvmch@gmail.com).

J Health Allied Sci [NS]2021;11:101–103

Abstract

The incidence of acute myocardial infarction with nonobstructive coronary arteries in young age less than 20 years in India due to hereditary thrombophilia is uncommon. Combined protein S and protein C deficiency has an increased tendency for coronary artery thrombosis in very young individuals. Acute myocardial infarction in young individuals has different risk factors profile, clinical presentation, and prognosis when compared with elderly population and hence incites the need for different approach in the management. Here we report a case of 17-year-old boy who presented with acute inferior wall myocardial infarction with nonobstructive coronary arteries due to hereditary protein C and protein S deficiency.

Keywords
- MINOCA
- thrombophilia
- protein C and protein S deficiency
- anticoagulants
- recurrence of events

Introduction

Coronary artery diseases are considered to be one of the leading causes of mortality and disability in adults worldwide. Acute myocardial infarction in very young patients less than 35 years of age is estimated to be less than 2%. In India there is a rise in the number of young patients with myocardial infarction, where majority of people lack the conventional risk factors.[1]

Young adults with no evidence of atherosclerosis and no major risk factors should be evaluated for deficiency of major anticoagulant proteins especially protein C and protein S. The patients with myocardial infarction should be started on lifelong systemic anticoagulants to prevent the recurrence of events.

Case Report

A previously healthy 17-year-old boy presented to the emergency department with complaints of recurrent vomiting and epigastric pain associated with palpitation and giddiness for 1 hour. He was conscious, oriented with normal Glasgow Coma Scale. His blood pressure was 100/60 mm Hg, heart rate of 88 per minute, saturation was 100% at room air. His cardiovascular clinical examination was found to be normal.

A standard 12 lead electrocardiogram (ECG) showed ST segment elevation of more than 2 mm in lead II, III, aVF suggestive of inferior wall myocardial infarction (►**Fig. 1**) with no extension in right ventricular and posterior wall which was confirmed by taking right-sided and posterior ECG. Basic investigations were found to be normal. The two-dimensional (2D) echocardiogram showed an adequate LV function with mild hypokinesia of inferior wall. He was immediately thrombolyzed with injection Tenecteplase (recombinant tissue plasminogen activator), after thrombolysis he symptomatically improved with resolution of ST segment elevation indicating successful thrombolysis. CK-MB (creatine kinase myocardial band) was elevated, and troponin I was found to be positive.

published online
December 30, 2020

DOI https://doi.org/10.1055/s-0040-1722427
ISSN 2582-4287.

Thieme Medical and Scientific Publishers Pvt. Ltd. A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

Medicine Updates Faculty of medicine
October 2021,volume 7, issue 7

https://muj.journals.ekb.egdean@med.psu.edu.eg
vice_dean_postgraduate@med.psu.edu.eg
DOI: 10.21608/muj.2021.94802.1059

ISSN : 2682-2741

Submitted: 70/9/2021
Accepted : 11/9/2021

Pages:1- 10

Food safety and hospital managemen

Authors

Marwa Salem[1], Heba Elsayed[2], Pansaia Nofal[3]; Eman Hosny Dahroug[4]; Salma Elsayed Elzoghby[5]; Mona mostafa[6]; Radwa metwlai[7]; Mohamed Azzam[8]; Mahmoud zaki[9]; Ahmed Gamal[10]; Kariem Elaraby[11]; Gehad abo Alezz[12]

[1]Pharmacist & ndash; Alsalam Hospital.

[2] Port Said University

[3]Infection control specialist -Elkaboti unit

[4]pharamacist - Ganoub - El betroul unit

[5]Faculty of Nursing, Port Said University

[6]Chemist lab- Elmoalmen Hospital

[7]Nursing technician , the specialized obs and gyne hospital portsaid

[8]Dentist-New Bahr Albaqar Unit

[9]Specialist obstetrician and gynecologist

[10]Purchases official

[11]Dentist Mustafa Kamel Center

[12]Pharmacist&infection prevention and control specialist Mustafa Kamel Center

Review Article

Indian J Med Res 138, December 2013, pp 847-852

Climate change & infectious diseases in India: Implications for health care providers

V Ramana Dhara, Paul J. Schramm* & George Luber*

*Environment, Safety & Health Compliance Office, Centers for Disease Control & Prevention & *Climate & Health Program, National Center for Environmental Health, Centers for Disease Control & Prevention, Atlanta, GA, USA*

Received August 14, 2012

Climate change has the potential to influence the earth's biological systems, however, its effects on human health are not well defined. Developing nations with limited resources are expected to face a host of health effects due to climate change, including vector-borne and water-borne diseases such as malaria, cholera, and dengue. This article reviews common and prevalent infectious diseases in India, their links to climate change, and how health care providers might discuss preventive health care strategies with their patients.

Key words: Climate change - human health - India - vector-borne disease - water-borne disease

Introduction

Infectious disease distribution involves complex social and demographic factors. These include human population density and behaviour, housing type and location, water supply, sewage and waste management systems, land use and irrigation systems, availability and use of vector control programmes, access to health care, and general environmental hygiene. Meteorological factors that influence transmission intensity of infectious diseases include temperature, humidity, and rainfall patterns. Social and demographic factors such as population growth, urbanization, immigration, changes in land use and agricultural practices, deforestation, international travel, and breakdown in public health services have been mainly responsible for the recent resurgence of infectious diseases[1]. The Intergovernmental Panel on Climate Change noted in its 2007 report that climate change may contribute to expanding risk areas for infectious diseases such as dengue and may increase the burden of diarrhoeal diseases, putting more people at risk[2].

Global climate change is a phenomenon that is now considered strongly associated with human activities. Atmospheric carbon dioxide levels, which have remained steady at 180-220 ppm for the past 420,000 years, are now close to 370 ppm and rising[3]. Due to improvements in meteorology, we are now able to better understand long-term changes in climate. Such understanding might enable the prediction of where and when infectious disease outbreaks may occur. Box 1 outlines some of the consequences of climate change that clinicians in India could expect to see over

Wonder drug for worms: A review of three decades of ivermectin use in dermatology

Saravanan Gowtham, Kaliaperumal Karthikeyan

Introduction

Ivermectin has evolved over the last three decades from being a veterinary "blockbuster" drug to a panacea for nematodal infestation and ectoparasitic diseases in humans.[1] This oral drug has breathed fresh life in the management of ectoparasitic infections which was conventionally based only on topical medications. In this review, we discuss the intriguing journey of this drug in dermatology.

History of Ivermectin

In early 1970, Omura and William Campbell identified a soil bacterium which was named *Streptomyces avermectinius*. The active component produced by the bacterium was termed as avermectin.[2] Ivermectin is a synthetic derivative of avermectin with a structural similarity to macrolide antibiotics.[3] It was first used in veterinary treatment in 1981, and now is being used to treat billions of livestock and pets around the world for varied nematodal infestations.[2] It was first used in humans after 1981 as a treatment against *Onchocerca volvulus*.[3] The role of ivermectin in dermatology was a serendipitous discovery which catapulted ivermectin to the zenith of anti-parasitic remedies.

Structure of Ivermectin

The structure of ivermectin is shown in Figure 1. The molecular formula of ivermectin is $C_{48}H_{74}O_{14}$.[4]

Pharmacokinetics

In humans, the oral route is the only approved route for administration of ivermectin, and it is usually recommended to be taken on an empty stomach with water. In the skin, the peak concentration of the drug was noted 8 h after a 12-mg oral dose, whereas the peak serum level is reached in 4 h after administration.[5] Between 6 and 12 h after the dose, a second peak occurs due to enterohepatic recycling of the drug.[5] It is extensively metabolized by cytochrome P450 and is excreted almost exclusively in feces.[3] The half-life of the drug is around 18 h, and the anti-parasitic activity lasts for several months after a single dose.[3]

Mechanism of Action

Ivermectin is an endectocide, which selectively binds to glutamate-gated chloride channels in invertebrates. This causes hyperpolarization of parasite neurons and muscles by increasing chloride ion influx, ultimately resulting in death of the parasite. It acts on endoparasites and ectoparasites by suppressing the nerve impulse conduction in intermediary neurons or in nerve-muscle synapses, respectively.[6,7] Due to the localization of these channels in the central nervous system and inability of ivermectin to cross the blood–brain barrier, humans are not affected except those with a history of undergoing shunt surgeries.[6]

Indications in Dermatology

The indications for ivermectin use in dermatology are summarized in Table 1.

Scabies

Ivermectin is the only recommended oral medication for scabies.[8] Two doses of oral ivermectin are given 7 days apart, to act on newly hatched scabietic nymph. In severe or resistant cases, it is often combined with topical medications like permethrin.[9] Two doses of topical ivermectin were also found to be as effective as two applications of permethrin.[10]

Department of Dermatology Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Correspondence: Dr. Saravanan Gowtham,
Department of Dermatology Venereology and Leprosy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.
E-mail: gowthamderm@gmail.com

Access this article online

Quick Response Code:

Website: www.ijdvl.com

DOI: 10.4103/ijdvl.IJDVL_840_18

How to cite this article: Gowtham S, Karthikeyan K. Wonder drug for worms: A review of three decades of ivermectin use in dermatology. Indian J Dermatol Venereol Leprol 2019;85:674-8.

Received: November, 2018. Accepted: May, 2019.

JMSCR Vol||07||Issue||11||Page 254-255||November 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i11.43

Journal Of Medical Science And Clinical Research

Hepatocellular Carcinoma with Bi-atrial invasion

Authors
Uthaya Sankar M.K[1], Sibi Chakravarthy.C[2], Naveen Sathish.V[3]
[1]Professor, [2,3]Post Graduate Residents, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Abstract
Hepatocellular carcinoma (HCC) is the most common primary tumor of the liver. The Right heart is affected in up to 2% of metastatic HCC cases. However this was the first case of HCC to be reported with bi-atrial involvement. CECT showed Multifocal HCC in right lobe of liver with tumour thrombus extending along right portal vein, right hepatic vein into IVC and right atrium and extending across the atrial septum into left atrium via sinus venosus ASD. Intracardiac involvement has got very poor prognosis.

Introduction

Hepatocellular carcinoma (HCC) is the fifth most common cancer in the world and the third most common cause of cancer death[1]. It is the most common primary tumour of the liver. Although HCC usually metastasizes to regional lymph nodes, lung, or bones, it can also invade major local blood vessels and rarely the heart. Metastasis to heart can occur via blood stream or direct invasion of IVC[2]. For such metastatic disease only chemotherapy or supportive measures alone can be tried.

Case report

A 60 Year old male who was a chronic alcoholic presented with swelling of both legs followed by abdomen distension with of yellowish discolouration of urine and eyes which was for a duration of 14 days. He was a chronic alcoholic and smoker for 30 years. Similar complaints were present one year back. On general examination patient was malnourished with icterus and bilateral pitting pedal edema. Abdomen examination showed dilated veins over abdomen and back with flow below upwards, tender hepatomegaly and fluid thrill. Blood investigations revealed deranged LFT and Hepatitis B positive. Ascitic fluid analysis revealed a high serum-ascitis albumin gradient (SAAG) and low protein and cytopathology study showed atypical cells. USG abdomen showed multiple ill-defined hyperechoic lesions in liver with coarse echotexture. Echocardiogram revealed right atrial thrombus with sinus venosus ASD.

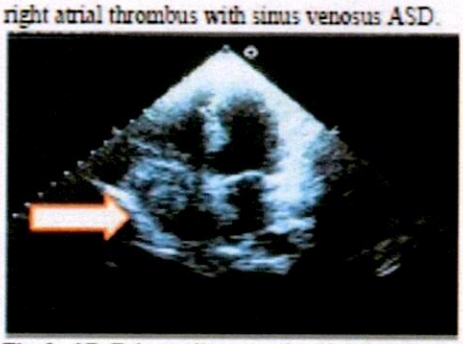


Fig 1: 2D Echocardiogram showing hyperechoic thrombus in both right and left atrium.

International Journal of Otorhinolaryngology and Head and Neck Surgery
Gandhi G et al. Int J Otorhinolaryngol Head Neck Surg. 2019 Mar;5(2):269-272
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937
DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20190454

Original Research Article

A comparative study of CO_2 laser tonsillectomy versus conventional tonsillectomy in our experience

G. Gandhi, Poornima S. Bhat*, K. Pradheep

Department of ENT, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, Tamil Nadu, India

Received: 13 January 2019
Revised: 31 January 2019
Accepted: 01 February 2019

***Correspondence:**
Dr. Poornima S. Bhat,
E-mail: santhanakrishnan2709@gmail.com

ABSTRACT

Background: Tonsillectomy is one of the major surgical procedure in terms of volume in the oto-rhino-laryngological practice. It is an age old surgical procedure, referred in history of medicine. There have been various changes in the indications and surgical procedures since 4 to 5 decades.

Methods: A comparative study between the CO_2 laser and conventional method (dissection Hospital set up, by the same surgeon, using two different techniques. The main objective of the study is to compare the intra-operative events (blood loss, time taken for surgery). This study was done in 40 patients undergoing tonsillectomy with or without adenoid hypertrophy removal over a period of 1 year (June 2015– May 2016). The patients (20 cases) in the first half of this period underwent conventional tonsillectomy whereas the rest (20 cases) underwent CO_2 laser tonsillectomy. The gathered data were analysed by SPSS software (Ver-25) and using necessary tests. The differences between studied groups less than 0.5 ($p<0.05$) considered significant statically.

Results: Among 40 patients, 20 cases underwent tonsillectomy by CO2 laser and 20 cases by conventional method. 20 patients who underwent laser tonsillectomy had lesser bleeding (25 ml vs. 60 ml) intraoperatively, $p<0.05$ (significant) and total time consumed during surgery is less (4.5 minutes vs. 15 minutes) with laser when compared to conventional method $p<0.05$ (significant).

Conclusions: CO_2 laser tonsillectomy is associated with low intraoperative bleeding and less time consuming surgery when compared to conventional tonsillectomy.

Keywords: Tonsillectomy, CO_2 laser, Conventional method, Dissection and snare

INTRODUCTION

Tonsillectomy is one of the major surgical procedure ENT practice. Chronic tonsillitis has significant impact on quality of life and tonsillectomy done to treat the condition is a major procedure which can lead to many intra operative and post-operative complications including bleeding, pain etc. resulting in absence from school/work and reduced quality of life. There has been a conceptual change in the indications and surgical technique in the last 40 years.[1] Tonsillar diseases are among the most commonly encountered health-related problems in the general population. The choice of treatment is often tonsillectomy, which is still the most frequently performed surgical procedure in children and young adults.[2] The most common organism causing acute tonsillitis is group A beta hemolytic *Streptococcus*. Patients who met the Paradise's criteria for tonsillectomy were prepared for surgery.

The objective of this study was to compare CO_2 laser tonsillectomy with conventional tonsillectomy in terms of intra operative events like bleeding and duration of surgery.

International Journal of Otorhinolaryngology and Head and Neck Surgery
Bhat PS et al. Int J Otorhinolaryngol Head Neck Surg. 2019 Mar;5(2):472-475
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937

Original Research Article

DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20190491

A comparative study of hearing outcomes in canal wall up versus canal wall down mastoidectomy in our experience

Poornima S. Bhat, G. Gandhi*, K. Pradheep

Department of ENT, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Received: 13 January 2019
Revised: 01 February 2019
Accepted: 02 February 2019

***Correspondence:**
Dr. G. Gandhi,
E-mail: santhanakrishnan2709@gmail.com

ABSTRACT

Background: COM causes considerable morbidity with ear discharge, conductive hearing loss and complications. Ossicular reconstruction is a surgical procedure which intends to improve the quality of hearing and life in such patients. Comparison of the outcomes will help to determine the merits or demerits of a particular procedure.
Methods: The study was conducted in the Department of ENT, VIMS, Bellary during the period from December 2010 to May 2012. All the patients with CSOM with ossicular erosion suggested by conductive hearing loss more than 40dB were included in the study. A detailed history taking, thorough clinical examination was done for these patients. Before and after the procedure pure tone audiometry was done to assess the hearing outcome. Post operatively PTA was done in 6th week, 3rd month, 6th month follow up. Hearing improvement was analysed according to the type of procedure. The data collected was tabulated and subjected to statistical analysis.
Results: This study compared the outcomes of hearing gain in canal wall up versus canal wall down mastoidectomy surgeries. Hearing gain was better in canal wall up mastoidectomy (18.36 dB) than canal wall down mastoidectomy surgeries.
Conclusions: Hearing outcome was better in intact canal wall mastoidectomy than canal wall down mastoidectomy in our study.

Keywords: Chronic suppurative otitis media, Canal wall up mastoidectomy, Canal wall down mastoidectomy

INTRODUCTION

Chronic suppurative Otitis media is typically a persistent, potentially dangerous disease often capable of causing severe destruction and irreversible sequelae such as fatal intracranial complications leading to undue burden on the patient, family and society.[1]

CSOM and associated hearing loss is significant in our society and an effort directed towards the assistance of those who are afflicted is indeed worthwhile. The consistent achievement of good hearing results in the presence of CSOM is still one of most difficult challenges of otologic surgery, so many great otologist innovated and improved the quality of surgery and results.[2,3]

Modified radical mastoidectomy (MRM) provides relatively safe surgical access for the removal of chronic middle ear and mastoid disease and gives reproducible results. However, it had been suggested that hearing may not be as good as that after "intact canal wall mastoidectomy" (ICWM).[4,5]

This study was done to compare hearing outcomes between canal walls up versus canal wall down mastoidectomy surgeries.

International Journal of Otorhinolaryngology and Head and Neck Surgery
Santhanakrishnan K et al. Int J Otorhinolaryngol Head Neck Surg. 2019 Mar;5(2):400-402
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937

Original Research Article

DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20190455

A comparative study of hearing outcomes in myringostapediopexy and myringoplatinopexy in our experience

K. Santhanakrishnan, G. Gandhi*, K. Pradheep

Department of ENT, Sri ManakulaVinyagar Medical College and Hospital, Pondicherry, Tamil Nadu, India

Received: 13 January 2019
Revised: 31 January 2019
Accepted: 01 February 2019

***Correspondence:**
Dr. G. Gandhi,
E-mail: santhanakrishnan2709@gmail.com

ABSTRACT

Background: COM causes considerable morbidity with ear discharge, conductive hearing loss and complications. Myringostapediopexy and myringoplationpexyis a surgical procedure which intends improve the hearing and quality of the life.

Methods: The study was conducted in the department of ENT, SMVMCH, Puducherry from April 2017 to April 2018. A detailed history taking thorough clinical examination done for these patients. PTA was done before the procedure, post operatively at 3rd month. Hearing improvement analysed using different parameters like type of graft used, hearing gain and graft uptake. The data collected was tabulated and subjected to statistical analysis.

Results: Myringostapediopexy better hearing gain than myingoplatinopexy. Myringostapediopexy mean hearing gain 19.53 dB, myringoplatinopexy 12.59 dB.

Conclusions: This study compared the hearing outcomes of Myringostapediopexy and myringoplatinopexy with respect to hearing gain. Myringostapediopexy better hearing gain than myringoplatinopexy due to presence of stapes supra-structure.

Keywords: Chronic suppurative otitis media, Autologous ossicles, Temporalis fascia, Myringostapediopexy, Myingoplatinopexy

INTRODUCTION

Chronic suppurative otitis media (CSOM) is a common cause of hearing impairment and disability, leading to fatal intracranial and extracranial infections.

Chronic suppurative otitis media (CSOM) prevalence varies in different parts of the world. It varies from one percent in some parts of the world to more than forty percent in other parts of the world.[1]

Many factors have been outlined as risk factors for "chronic suppurative otitis media". These include younger age, people living in overcrowded dwellings, lack of proper housing conditions, lack of proper hygiene, malnutrition, exposure to indoor or outdoor pollution, dysfunction of eustachian tube etc.[2]

Ossiculoplasty represents the reconstruction of the ossicular chain integrity in such a manner that it will transmit sound vibrations from the tympanic membrane to the oval window and to the inner ear. The aim of ossiculoplasty is to restore the ossicular chain as much as possible In the last three decades, various ossiculoplasty methods have evolved and good results were achieved. Nevertheless ossicula reconstruction continues to be a process in evolution.[3]

International Journal of Otorhinolaryngology and Head and Neck Surgery
Gandhi G et al. Int J Otorhinolaryngol Head Neck Surg. 2019 Mar;5(2):336-339
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937

Original Research Article

DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20190490

Wide bore needle aspiration for peritonsillar abscess

G. Gandhi, K. Santhanakrishnan*, Poornima S. Bhat

Department of ENT, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, Tamil Nadu, India

Received: 13 January 2019
Revised: 03 February 2019
Accepted: 05 February 2019

***Correspondence:**
Dr. K. Santhanakrishnan,
E-mail: santhanakrishnan2709@gmail.com

ABSTRACT

Background: Peritonsillar abscess is the most common complication of acute tonsillitis.
Methods: A retrospective review was conducted to identify the cause, microbiology, management and outcomes of the peritonsillar abscess. Over a period of 4 years from September 2014 to September 2018, patients presenting with peritonsillar abscess to the Department of ENT, SMVMCH, Puducherry, who underwent wide bore needle aspiration at least once were included in this study. 45 patients were included in the study. Exclusion criteria were retropharyngeal and parapharyngeal abscess.
Results: Among 45 patients, 18 were males and 27 were females. Two patients presented with bilateral peritonsillar abscess. 40 patients responded well with initial wide bore needle aspiration and IV antibiotics, with no postoperative complications. 5 patients needed incision and drainage under local anaesthesia.
Conclusions: Wide bore needle aspiration is easy and cheap, less invasive, effective method of management in emergency situations of peritonsillar abscess. Early wide bore needle aspiration and IV antibiotics will prevent complications and reduce the need for incision and drainage.

Keywords: Peritonsillar abscess, Wide bore needle aspiration, Incision and drainage

INTRODUCTION

Peritonsillar abscess, also known as quinsy is a mixed bacterial infection leading to pus collection between capsule and superior constrictor muscle. It is usually preceded by peritonsillar cellulitis. Quinsy and peritonsillitis are common throat emergencies and is the most common head and neck abscess. Peritonsillar abscess commonly presents between 3rd to 4th decade of life and commonly occurs in winter and summer season commonly because of high incidence of streptococcal pharyngitis.[1-3] Peritonsillar abscess arises from Weber's glands.[4-7] Most common causative organism for peritonsillar abscess is mixed anaerobes and Group A *Streptococcus*.[8-14] The objective of this study was to compare the outcome of two important surgical procedures for management of peritonsillar abscess incision and drainage and wide needle aspiration.

METHODS

In this study retrospective review of clinical data of patients with peritonsillar abscess presenting over 4 years period from September 2014 – September 2018 to the department of ENT at Sri Manakula Vinayagar Medical College and Hospital, Puducherry was done. Clinical case sheets, culture sensitivity reports, operative notes were used to collect the patients details. 45 patients with a documented peritonsillar abscess having had wide bore needle aspiration at least once were included in the study. Exclusion criteria were retropharyngeal and parapharyngeal abscess.

International Journal of Otorhinolaryngology and Head and Neck Surgery
Bage AM et al. Int J Otorhinolaryngol Head Neck Surg. 2019 Jul;5(4):893-899
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937

Original Research Article

DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20192069

Effect of radiofrequency vs other surgeries in the management of obstructive sleep apnoea

Atul M. Bage, Lakshman Bhaskar Muthuvel*, Pradheep Kalatharan

Department of ENT, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Received: 28 March 2019
Revised: 25 April 2019
Accepted: 29 April 2019

***Correspondence:**
Dr. Lakshman Bhaskar Muthuvel,
E-mail: lachu_mak@hotmail.com

ABSTRACT

Background: Snoring is an important social problem seen in both men and women. Snoring occurs as a result of soft tissue vibration caused by a partial upper airway collapse during sleep. The aim of the study was to analyse the morbidity and efficacy of radiofrequency thermal ablation of upper airway in patients suffering from OSA.
Methods: In the Department of ENT, Pondicherry, 40 patients between the age group of 20 to 60 years who were diagnosed to have OSA were operated according to the site of obstruction including RFVTR. Various parameters including ESS, partner scores, post-op pain, bleeding, pharyngeal dryness voice change were measured accordingly on the 1st day, 45th day, 90th day and 180th day postoperatively for the efficacy of treatment and also for assessing the morbidity of treatment provided.
Results: There is a statistically significant reduction in ESS scores and partner scores between pre-operative period and post operatively on the 45th day, 90th day and 180th day. Post-operative pain assessment also showed that patients who underwent RFVTR had lesser pain when compared to other surgeries like zetaplasty, LAUP, etc.
Conclusions: Radiofrequency surgery should be considered as the treatment of choice for mild OSA and hypopneic snorers. The important advantage of these procedures is technically simple and minimally invasive. RFTA of the soft palate leaves the mucosa intact contrary to LAUP, hence the pain comparably less. Relatively cost effective when compared to LASER and Coblator.

Keywords: Radiofrequency thermal ablation, OSA, RFVTR, RAUP

INTRODUCTION

Snoring is an important social problem seen in both men and women. Snoring is part of the spectrum of sleep disordered breathing (SDB), from obstructive sleep apnoea hypopnea OSAHS at one end to simple snoring at the other. Snoring can occur as primary snoring or as part of a syndrome of the obstructive sleep apnoea.

A conservative estimate of the prevalence of OSAHS in middle aged men (30-65 years) is in the range of 0.34% with most studies giving a prevalence of 1-2% which is a simple prevalence to type 2 diabetes and approximately double that of severe asthma.[1] The prevalence of OSAHS in middle-aged women has been less well studied but is probably about half that in males at around 0.51%.[1]

Snoring occurs as a result of soft tissue vibration caused by a partial upper airway collapse during sleep. The most common site of obstruction during snoring is the soft palate, however, other regions of the upper airway tract also may cause snoring such as the nose, base of tongue, tonsils and the epiglottis.

OSA is clinically associated with obesity epidemic globally, and it is characterized by repetitive, partial or complete collapse of the upper airway during sleep, causing impaired gaseous exchange and sleep

International Journal of Otorhinolaryngology and Head and Neck Surgery
Bage AM et al. Int J Otorhinolaryngol Head Neck Surg. 2019 May;5(3):563-567
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937

Original Research Article

DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20191441

Incidental presence of non recurrent laryngeal nerve in our series of thyroidectomy

Atul M. Bage[1], Lakshman Bhaskar Muthuvel[1]*, Akshaya A. C.[1], Nutan N. Bage[2]

[1]Department of ENT and HNS, Sri ManakulaVinayagar Medical College, Pondicherry, India
[2]Department of Anatomy, PIMS, Pondicherry, India

Received: 07 March 2019
Revised: 22 March 2019
Accepted: 23 March 2019

***Correspondence:**
Dr. Lakshman Bhaskar Muthuvel,
E-mail: lachu_mak@hotmail.com

ABSTRACT

Background: Recurrent laryngeal nerve (RLN) injury is one of the most important and preventable complications of thyroidectomy which is the cause of post-operative iatrogenic vocal cord paralysis. The non-recurrent laryngeal nerve (NRLN), which is found in 0.25–0.99 of the patients who undergo thyroid surgery, is a rare embryologically-derived variant of the recurrent laryngeal nerve (RLN). Identification and prevention of injury to the laryngeal nerve is very important in thyroid surgery. The objective of the study was to highlight the incidence of Non-recurrent laryngeal nerve in our series of thyroidectomy cases.

Methods: In the Department of Otorhinolaryngology, Pondicherry a retrospective analysis of all the thyroid surgeries that were operated between August 2006-November 2018 for various indications on a total of 1006 patients was done with specific interest in the lookout for anatomical variant of recurrent laryngeal nerve and findings were recorded.

Results: Among all the cases, two patients with MNG who had underwent Total thyroidectomy were found to have anatomical variants of recurrent laryngeal nerve (non recurrent laryngeal nerve) intra operatively.

Conclusions: The NRLN is a rare finding and is associated to an increased risk in iatrogenic injury especially during thyroid surgeries unless thorough anatomical knowledge and cautious dissection is not done.

Keywords: Non-recurrent laryngeal nerve, Anatomical variants of recurrent laryngeal nerve, Recurrent laryngeal nerve injury

INTRODUCTION

Goiters are managed universally using medications to make it euthyroid and then surgically removed. Among the complications of thyroidectomies, the most dreaded and commonly encountered ones are vocal cord paralysis and post-operative hypocalcaemia. The thyroid surgeon should be familiar with the anatomy of the RLN, including all its anatomical variations.

Recurrent laryngeal nerve (RLN) injury is one of the most important and preventable complications of thyroidectomy which is the cause of post-operative (iatrogenic) vocal cord paralysis.[1] It is also one of the common reasons for litigation after thyroid surgery in the West.[2]

The RLN arises from the vagus nerve that supplies all the intrinsic laryngeal muscles, except for the crico-thyroid muscles. In thyroid surgery, RLN identification and preservation are fundamental steps. Non-recurrent laryngeal nerve (NRLN) is known as a rare anatomical variant of RLN with the proportion of 0.3%- 0.8% on the right side, and 0.004% (exceptionally rare) on the left side.[3]

JMSCR Vol||07||Issue||11||Page 230-231||November 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i11.39

Journal Of Medical Science And Clinical Research

Lithium Toxicity Causing Neuroleptic Malignant Syndrome

Authors
Uthaya Sankar M.K[1], Naveen Sathish.V[2], Sibi Chakravarthy.C[3]
[1]Professor, [2,3]Post Graduate Residents
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Abstract
Lithium is used as a mood stabiliser. Here we report a case of bipolar disorder on Lithium and Olanzapine presented with fever, generalised rigidity and unconsciousness. He was diagnosed as Neuroleptic malignant syndrome (NMS). His serum lithium level was elevated. Lithium associated NMS usually occurs only in combination with antipsychotics at around 0.01-3%.

Introduction

Neuroleptic malignant syndrome (NMS) is a life-threatening neurologic emergency associated with the use of antipsychotic (neuroleptic) agents and characterized by a distinctive clinical syndrome of mental status change, rigidity, fever, and dysautonomia. Incidence rates for NMS range from 0.02 to 3 percent among patients taking antipsychotic agents. NMS is mostly found associated with the use of traditional antipsychotics, but may also occur when atypical antipsychotics such as risperidone, olanzapine, and clozapine are used[1].

There are some cases of NMS associated with the use of non-neuroleptic drugs, like carbamazepine and metoclopramide,or drugs without known anti-dopaminergic activity, such as lithium. Lithium is a first-line mood stabilizer used in the treatment and prophylaxis of bipolar disorder. There are several case reports of lithium-associated NMS, but only in combination with antipsychotics[2].

Case Report

A 54 year male presented to casualty in unconscious state with history of fever for past four days after which he developed generalised rigidity and altered sensorium. No other positive history. He was an old case of bipolar disorder and was on lithium and olanzapine for past 20 years. On examination his GCS was 5/15 with a raised heart rate of 120/min, blood pressure of 160/100 mm Hg and a temperature of 104°F and oxygen saturation of 85%. Systemic examination showed bibasal coarse crepititions and a rigid tone of all four limbs. Blood investigations showed elevated total count and renal profile and elevated creatine kinase. Chest x-ray showed features of aspiration pneumonia. Neuroimaging showed no abnormality. He was diagnosed as Neuroleptic Malignant Syndrome and aspiration Pneumonia. Due to poor GCS he was intubated and mechanically ventilated. The reason for his NMS was evaluated and his serum Lithium level was elevated at 4.3meq/L. Lithium was discontinued. He was treated with intravenous antibiotics,

JMSCR Vol||07||Issue||12||Page 215-216||December 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i12.37

Journal Of Medical Science And Clinical Research

Extranodal Non-Hodgkin's Lymphoma presenting as Cavernous sinus syndrome

Authors
Uthaya Sankar M.K[1], Naveen Sathish.V[2], Sibi Chakravarthy.C[3]
[1]Professor, [2,3]Post Graduate Residents, Department of General Medicine
Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107

Abstract
Non-Hodgkin's lymphoma (NHL) is a monoclonal proliferation of lymphoid cells of B cell (70%) and T cell (30%) origin. Primary lymphomas of uterine cervix are rare. Central nervous system involvement can occur as a late manifestation of NHL and may include mass lesions and meningeal infiltration. This is a rare case of uterine cervical non hodgkins lymphoma presented as cavernous sinus syndrome.

Introduction

Non Hodgkin's lymphomas are cancers of mature B, T, natural killer cells. It constituted 4% of all cancers and it is the ninth most common cause of cancer related death. The incidence is 1.5-2% per year. About 90% are B-cell origin. T-cell lymphomas are more common in India. The five year survival rate is 72%.[1]

The clinical presentation can be asymptomatic or the presence of B symptoms such as fever, night sweats, unexplained weight loss. Diffuse large B-cell lymphoma is the most common type. Upto 40% patients will have involvement of non-lymph node sites.[1]

Case Report

This is a case of a 32 year old female who was apparently healthy 20 days back and then developed toothache for which her lower premolar was removed due to presence of caries. Two days later she developed headache which was progressive, dull aching, diffuse, not associated with vomiting and seizure. Associated with pain over the cheek for the past 10 days with low grade intermittent fever for 6 days. She came to our hospital for her main complaint of inability to open and move her left eye for past 4 days. No history of eye swelling, blurring of vision, eye pain, discharge, redness, local injury, double vision. No history of similar complaints on her left eye. History of altered sensation over the face is present. No history of any other cranial nerve, motor, sensory abnormality. On examination positive findings were left eye partial ptosis with dilated and non reacting pupil with nil movements and reduced sensation over the V1 and V2 distribution on the face. Abdomen examination revealed non tender hepatomegaly. Rest of the examination was normal.

Blood investigations showed deranged urea and creatinine. USG abdomen was done in view of view of elevated RFT. USG abdomen and pelvis revealed hepatosplenomegaly, bulky uterus and cervix with enlarged right ovary, right adnexal

JMSCR Vol||07||Issue||11||Page 216-217||November 2019

http://jmscr.igmpublication.org/home
ISSN (e)-2347-176x ISSN (p) 2455-045
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i11.3

Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publications

A Rare Presentation of Migraine

Authors
Uthaya Sankar M.K[1], Louis Ferdin Zeno.J[2], Mythreini Satheesh[3]
[1]Professor, [2,3]Post Graduate Residents, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India

Abstract
Familial hemiplegic migraine (FHM) is a rare subtype of migraine with prevalence of 0.003%. Here we report a case presented with headache with nausea and blurring of vision with associated limb weakness with similar episodes in the past and a positive family history with a normal neuroimaging.

Introduction

Familial hemiplegic migraine (FHM) is a rare subtype of migraine presenting with recurrent attacks of migraine with aura and transient neurological deficit[1]. The prevalence of FHM is 0.003%[2]. It is of four types. As of now three genetic mutations are identified- CACNA1A gene in FHM1, ATP1A2 gene in FHM2 and SCN1A gene in FHM3. These genetic mutations cause abnormalities in the ion channels, altering the membrane excitability and predisposing to migraine[3].

Case Report

A 31 years old male presented with headache, blurring of vision in the left eye, nausea followed by weakness of left upper and lower limb for 6 hours duration. He had similar complaints twice in the past and got resolved within a day. He also had history of similar complaints in his family with his brother and mother. CNS examination revealed decrease power and tone on left side. His blood investigations were normal. His neuroimaging revealed normal study. He was diagnosed as Familial hemiplegic migraine. He was treated with calcium channel blocker and advised to follow up. On follow up his symptoms were resolved.

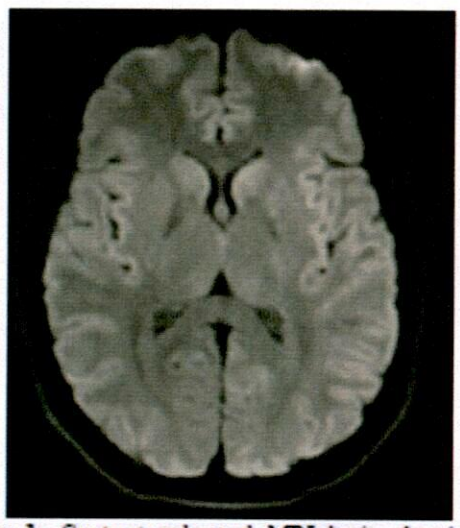


Fig 1: Contrast enhanced MRI brain showing normal brain parenchyma

The Open Urology & Nephrology Journal

Content list available at: https://openurologyandnephrologyjournal.com

RESEARCH ARTICLE

Prevalence of Chronic Kidney Disease and Its Determinants in Rural Pondicherry, India-A Community Based Cross-Sectional Study

Ravi Kumar P[1,*], Amol Dongre[2], R. Muruganandham[3], Pradeep Deshmukh[4] and D. Rajagovindan[5]

[1]*Department of Nephrology, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagedipeth, Puducherry, India*
[2]*Department of Community Medicine, Sri ManakulaVinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagedipeth, Puducherry, India*
[3]*Non Communicable Disease, District Program Officer- Ariyalur District, Government of Tamil Nadu, India*
[4]*Department of Community Medicine, Mahatma Gandhi Institute of Medical Sciences, Sewagram, Wardha, India*
[5]*Sri ManakulaVinayagar Medical College and Hospital, Kalitheerthalkuppam, Madagedipeth, Puducherry, India*

Abstract:

Introduction:

The burden of CKD is on the rise globally and in India. There are scarce population based studies based in rural industrialized settings in India and elsewhere.

Objective:

To find out the prevalence and determinants of Chronic Kidney Disease (CKD) among adults in rural Pondicherry, India

Methods:

It was a community-based cross-sectional study in 13 villages of a Primary Health Centre in rural Pondicherry. A representative sample of 422 adults more than or equal to 50 years of both genders was selected by population proportional to size methods. All the participants were screened by SCORED questionnaire to get the potential cases of CKD. We did serum creatinine, urine examination, blood pressure and anthropometric measurement for the potential cases. CKD was diagnosed by estimation of glomerular filtration rate and presence of proteinuria. The data was analyzed using Statistical Package for Social Science version 24. The study was approved by the Institutional Ethics Committee of SMCMCH, Pondicherry.

Results:

The prevalence of CKD was found to be 24.2% in the study sample of respondents 50 years or more. Most (73.5%) of the CKD cases were at stage 2, Stage 3a had 15% and stage 3b had 2% of the cases. The determinants of CKD were (60-69 years, PR: 2.36,CI:1.36-4.07), poor nutrition(underweight, overweight and obesity)poor nutritional status (underweight:PR: 2.26,CI:1.05-4.89), (overweight:PR: 2.19,CI:1.06-4.52), (obese:PR: 2.13 CI: 1.13-4.01) and presence of at least one chronic co-morbidity(PR:5.85,CI:1.38-24.78). Majority of the patients in the CKD group had minimal proteinuria 87.25%. And 42.15% of the CKD group had no k.w:5 or k.w:6.

Conclusion and Recommendation:

Considering the higher prevalence of CKD in the study area, targeted screening of adult population should be undertaken as means of early detection, diagnosis, treatment and follow up of at-risk individuals to prevent further progression of CKD. Further research is required to look at the aetiology of CKD.

Keywords: Chronic kidney disease, Epidemiology, Rural, India, Hypertention, Diabetes mellitus.

JMSCR Vol||07||Issue||07||Page 397-402||July 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i7.74

Journal Of Medical Science And Clinical Research

Original Article

A study of serum arginase activity in diagnosis of liver diseases

Authors

P. Anand[1], A.K. Badrinath[2], Suresh Babu .S[3*]

[1]Assistant Professor, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry

[2]Professor, Department of General Medicine, Sri Manakula Vinayagar Medical College and hospital, Puducherry

[3]Assistant Professor, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry

*Corresponding Author

Suresh Babu .S

Abstract

Background: *Liver disease presents as a spectrum of clinically asymptomatic liver disease to end stage liver disease. Various serum markers used in liver diseases but are not specific or sensitive and influenced by other factors. We do a battery of investigations - liver function tests. Liver biopsy is the gold standard investigation, but is invasive. There is a still a search for a non invasive and a better marker for diagnosis of liver diseases. Serum arginase an enzyme of urea cycle gets elevated in liver damage and can be used in diagnosing liver diseases.*

Objective: *To assess the serum arginase activity and state that it can be a marker of diagnosis of liver disease. To assess the severity of liver disease using serum arginase*

Materials and Methods: *This was a rural based teaching hospital based cross sectional study of 80 patients with liver diseases. The serum arginase level (by elisa method) in the patients were compared with the novel liver function tests. Also we analysed whether serum arginase can be used as a indicator of disease severity by comparing it with the Child-Pugh score and MELD score.*

Results: *The mean serum arginase value of the study subjects by ELISA method was 92.38 ng/ml with a p value of 0.01 and was found to be statistically significant. When compared with AST & ALT using Child Pugh and Meld score, serum arginase was found to have a poor correlation with severity with a p value of 0.976 with CP score and 0.83 with MELD score which was statistically insignificant. Serum AST values were better predictor of severity with a p value of 0.432 with CP score and 0.018 with MELD score which was statistically significant.*

Conclusion: *Serum arginase can be used in diagnosis of liver diseases but a poor indicator of the severity when compared with scoring systems. Serum AST correlated better with severity in this study.*

Introduction

Liver plays the central role in metabolism and liver diseases are in rising trend all over the world responsible for around 700 thousand deaths per year, the 14th commonest cause of death worldwide. The diagnosis of liver diseases is made by a battery of serological investigations and imaging techniques. The novel liver function

STUDY OF HIGH SPECIFIC C-REACTIVE PROTEIN IN ACUTE ISCHAEMIC STROKE

Madhan Kumar Subbarayan[1], Chinnaiyan P[2], Sravankumar Sampati[3]

[1]Postgraduate Resident, Department of General Medicine, Sri Venkateshwara Medical College Hospital and Research Centre, Ariyur, Puducherry, India.
[2]Professor and HOD, Department of General Medicine, Sri Venkateshwara Medical College Hospital and Research Centre, Ariyur, Puducherry, India.
[3]Postgraduate, Department of General Medicine, Sri Venkateshwara Medical College Hospital and Research Centre, Ariyur, Puducherry, India.

ABSTRACT

BACKGROUND

We wanted to study the highly specific C-reactive protein in acute ischaemic stroke and examine the acute ischaemic stroke patients in a region, against their CRP levels for stroke prognosis.

METHODS

This study was an observational study. The study was conducted at in Venkateshwara Medical College & Hospital. The sample size taken for the study is n=100 patients.

RESULTS

The association of highly specific C reactive protein with diabetes mellitus showed chi square 6.803, p<0.01, with cholesterol level chi square 9.425, p<0.01, with hypertension chi square 4.191, p<0.05, with ischaemic heart disease p<0.01, with smoking p<0.01, with alcoholism p< 0.01, with angina p<0.01.

CONCLUSIONS

The findings of the present study indicate that regulating the level of CRP will help to decrease the risk of acute schematic stroke. The study concludes that high hsCRP level predicts the chance of higher level of acute ischaemic stroke. Furthermore, diabetes mellitus is also associated with higher CRP level and this is the reason for majority stroke patients having diabetes mellitus. In-depth study in CRP levels and its regulation should be conducted.

HOW TO CITE THIS ARTICLE: Subbarayan MK, Chinnaiyan P, Sampati S. Study of high specific C-reactive protein in acute ischaemic stroke. J. Evolution Med. Dent. Sci. 2019;8(15):1243-1247, DOI: 10.14260/jemds/2019/276

BACKGROUND

Stroke being a serious neurological disease, is one of the major causes of disability throughout the world.[1] Of all cases of stroke, ischaemic strokes constitute 85-87 per cent. Spontaneous intracerebral haemorrhage and subarachnoid haemorrhage are caused by haemorrhagic stroke and account for the remainder of cases. Neuro-imaging investigations such as Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) are outstanding techniques in the management of stroke patients, the role biomarkers in supporting the clinical diagnosis of stroke, identifying patients at risk of disease and guiding treatment and prognosis should never be ignored.[2] Many ischaemic stroke candidate have been identified so far, but however, none are used in clinical practice. Principal causes of ischemic cerebrovascular disease are thrombosis, embolism and focal hype perfusion. These can lead to reduction or an interruption of Cerebral Blood Flow (CBF) that affects neurological function. Sudden onset of hemiparesis in an older person is the typical presentation of ischemic stroke. The extent of collateral flow and the location of occlusion determine the differences in symptoms and signs.

'Financial or Other Competing Interest': None.
Submission 07-05-2018, Peer Review 30-03-2019,
Acceptance 05-04-2019, Published 15-04-2019.
Corresponding Author:
Dr. Madhan Kumar Subbarayan,
No-4, Chairman Chidambaram Street, West Shanmugapuram,
Villupuram-605602, Tamilnadu, India.
E-mail: madhankumar711@gmail.com
DOI: 10.14260/jemds/2019/276

Atherosclerotic ischemic stroke which occurs without warning in more than 80% of cases is more common in the elderly.[3] Transient Ischemic Attack (TIA) which occurs a few months before the stroke is an important warning sign.

The pathophysiology of TIA is like that of ischemic heart disease. It is an atherosclerotic plaque in a cerebral artery ulcerates inducing accumulation of platelets and coagulation of fibrin to create thrombus that occludes the artery in arteriosclerosis. Which is induced by hypertension, small penetrating arteries in the deep white matter of the brain are affected creating small infarction known as lacunar infarcts. Patients with atrial fibrillation, nearly 80 per cent of them, myocardial infarction, prosthetic values, rheumatic heart disease and larger artery atheroma (Artery- artery embolus) are more susceptible to embolic ischaemic stroke. Atherosclerosis causes emboli, which can partially or temporally obstruct cerebral arteries triggering TIA.[4]

Infarction (Cellular death) occurs within minutes depending on the severity of the ischaemia, which causes irreversible damage even after the restoration of blood flow. This is known as 'core' of the infarct. The tissue surrounding the core is functionally affected because of reduced circulation but can recover once blood flow is restored.[5] This is termed as ischaemic penumbra of the stroke. However, in many cases it is amenable to treatment up to 12 hours, which is called the 'therapeutic window' open for thrombolysis. All necrotic tissues contain oedema and in large areas of necrosis, massive oedema presses adjacent tissues. This increases intracranial pressure and can trigger herniation of the brain resulting in death within a few days in 80 percent of the cases.[6,7]

Original Article

DOI: [illegible]

Radiology Section

Comparison of Carotid Artery Intima-media Thickness and Resistive Index by Ultrasound and Colour Doppler in Pre-hypertensives and Stage One Hypertensives

SUBHA VENKATACHALAM[1], UMAMAGESWARI AMIRTHALINGAM[2], ELAMPARIDHI PADMANABAN[3], KULASEKARAN NADHAMUNI[4], BALACHANDIRAN GOPALARATHNAM[5], NAGARAJAN KINATHANKARAIYAN[6]

ABSTRACT

Introduction: Pre-hypertension and stage one hypertension remains major public health problem in both developed and developing countries. It primarily affects elastic arteries, hence common carotid artery Intima-Media Thickness (IMT) and Resistive Index (RI) considered an early predictor of cerebrovascular and cardiovascular complications.

Aim: This study was aimed to assess common carotid artery IMT and Resistive Index in pre-hypertensives and stage one hypertensive patients and to compare the findings between both groups.

Materials and Methods: The study design was hospital based cross sectional study and was conducted in Sri Manakula Vinayagar Medical College and Hospital, Pondicherry. Forty non diabetic patients in the age group of 25-65 years were examined for carotid artery Doppler. The patients were divided into prehypertensives and stage I hypertensives. Bilateral common carotid artery IMT and RI were evaluated.

Results: Among the 40 patients studied, 24 patients were prehypertensives and 16 were stage I hypertensives, 70% were females and 30% were males. Palpitation was the commonest presenting symptom. Mean Systolic blood pressure was 128.25±4.66 in prehypertensives and 141.25±6.44 in stage I hypertensives. The mean IMT in both prehypertensives and stage I hypertensives was 0.06±0.01 on either side. Mean Resistive Index in prehypertensives was 0.73±0.06 on either side; while that in stage I hypertensives was 0.72±0.13 on right and 0.71±0.11 on left. However, no rise in IMT was observed with increasing age in both the groups. On comparison both the groups showed no significant difference in IMT and RI.

Conclusion: To conclude, both the prehypertensives and stage I hypertensives show similar pattern of IMT and RI of the common carotid artery.

Keywords: Palpitation, Pourcelot index, Vascular resistance

INTRODUCTION

Development of atherosclerosis in vascular system occurs by various mechanisms, among which hypertension is an important and independent risk factor [1]. More than ninety-five percentages of hypertensive patients in the community are of essential, whereas only a small percentage has an identifiable cause which is known as secondary hypertension. The various systemic changes can be assessed by the atherosclerotic changes that take place in the carotid artery [2]. It increases the risk of stroke, coronary artery disease and peripheral arterial disease by two-three folds with risk being proportional to the severity of hypertension [3].

Increase in IMT of an artery has been used as a surrogate marker of subclinical atherosclerosis and early detection of vascular events [3]. B-mode ultrasound of carotid arteries is a non-invasive, safe, inexpensive, sensitive, valid and reproducible method of directly assessing IMT [4]. The intima-media complex is made up of various elements like the endothelial cells, connective tissue and smooth muscle. This complex is measuring sonographically as the IMT [5].

The velocity of blood flowing via the carotid artery can be determined by colour Doppler [6]. There are multiple ways to increase the accuracy of the results, few of which are Doppler angle, sample volume box and colour gain [7].

According to Pourcelot RI is a haemodynamic parameter, which is determined by Doppler Sonography basically reflecting the vascular resistance which in turn depends on distensibility of the vessel [8].

The present study aimed to evaluate the common carotid artery IMT and RI by Ultrasound and Colour Doppler in prehypertensives and stage one hypertensive patients and to compare the findings between prehypertensives and stage one hypertensives.

MATERIALS AND METHODS

The study design was hospital based cross sectional study and was conducted in department of Radio-Diagnosis at Sri Manakula Vinayagar Medical College and Hospital, Puducherry. The study was approved by the Institute ethics committee. The duration of study was six months. Stage I hypertensive and prehypertensive subjects in the age group of 25 to 60 years were included. Those with history of Diabetes mellitus and hyperlipidemia were excluded from the study.

The subjects were divided as follows: Prehypertensives: Systolic Blood pressure: 120-139 mmHg or Diastolic Blood pressure: 80-89 mmHg; Stage I hypertensives: Systolic Blood pressure: 140-159 mmHg or Diastolic Blood pressure: 90-99 mmHg [9].

After obtaining informed consent, ultrasonography and doppler was performed using GE-voluson-S6 scanner with 7.5-10 MHz linear array transducer.

IMT defined as the distance between leading edge of the lumen-intima echo and leading edge of the media-adventitia echo is measured 1.5 cm proximal to its bifurcation. Then pulsed-Doppler carried out in Common Carotid Artery (CCA) 1.5 cm proximal to its bifurcation with maximum Doppler angle of 60°. The maximum systolic and minimum diastolic flow rates were determined and RI was calculated automatically in a cycle by means of in-built software.

Indian Heart Journal 71 (2019) 65–71

Contents lists available at ScienceDirect

Indian Heart Journal

journal homepage: www.elsevier.com/locate/ihj

Original Article

Procedural and follow-up clinical outcomes after chronic total occlusion revascularization: Data from an Indian public hospital

Ajith Ananthakrishna Pillai*, Sakthivel Ramasamy, Kabilan S. Jagadheesan, Santhosh Satheesh, Raja J. Selvaraj, Balachander Jayaraman

Department of Cardiology, Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER), Puducherry, 605006, India

ARTICLE INFO

Article history:
Received 2 August 2018
Accepted 25 December 2018
Available online 26 January 2019

Keywords:
Total occlusion
Outcomes
Revascularization
Ejection fraction
Anterograde technique

ABSTRACT

Background: Chronic total occlusion (CTO) continues to be challenging lesion subset for percutaneous intervention. Last decade has seen tremendous increase in percutaneous coronary intervention (PCI) in this subset owing to improved understanding of the anatomy and enhanced skillset with availability of dedicated hardware. We sought to study the outcomes of CTO PCI in an Indian public hospital.

Methods: This was a single-center non-randomized descriptive follow-up study on CTO PCI. The end-points were procedural success, immediate, and late adverse cardiovascular events [major adverse cardiac event (MACE)] and change in angina and left ventricular function at follow-up.

Results: A total 389 CTO lesions were treated with a success rate of 87% (339/389). The mean Japanese chronic total occlusion (J-CTO) score was 1.78 ± 0.12 (mean ± standard deviation). Multivariate analysis of different angiographic components of J-CTO score identified tortuosity ($p = 0.001$), calcifications ($p \leq 0.001$), and blunt stump ($p = 0.007$) as independent predictors of procedural failure. The periprocedural mortality was less than 1%, and the non-life threatening complications were about 4%. The MACE rate was significantly higher in the procedural failure group (60%) than in the procedural success group (5.3%, $p < 0.001$). An increase in left ventricular ejection fraction (LVEF) was noted following successful CTO PCI after complete revascularization.

Conclusions: The success rates for CTO PCI in this registry were about 87%. Immediate and long-term clinical outcomes were better with lower MACE (5%) after a successful procedure. A key outcome variable included an increase in LVEF among patients after a successful CTO PCI. The overall periprocedural complications were about 5.5%, but majority were non-life threatening.

1. Introduction

Chronic total occlusion (CTO) of a major epicardial vessel is seen in up to 20% patients undergoing diagnostic angiography and in up to 35% following an episode of acute coronary syndrome.[1,2,4] It is one of the most important indication for referral for coronary artery bypass surgery as well.[1–3,5] Of late, there are growing data, which indicate that successful treatment of CTOs results in improved symptoms, prolonged life, and improved left ventricular function status.[6–10] But the attainment of high-end technical skills, sophisticated hardwares, and dedicated training sessions with experts in this field have made a huge impact on the success rates of CTO in developed nations.[10–12] In developing countries such as India, the situations are different.[11,13,14] At one end, the country faces coronary artery disease (CAD) epidemic, and about 20% patients with diagnosed CAD shows the presence of CTO in one of the vessels.[13,15,16] At the other end, there is significant lag in attaining required technical skills and availing dedicated CTO hardware. We face many challenges in CTO percutaneous coronary intervention (PCI) especially as the procedure demands huge amount of resources in terms of multiple hardware and technical skill set. As there is no public insurance, all patients end up paying from their own, and poor patients face challenges in approaching private centers for treatment because of high treatment expenses owing to extra requirement of consumables.[17–19] Public hospitals in India thus receive large influx of patients for CTO PCI. We planned to study the procedural and clinical outcomes of CTO PCI in the public hospital set up in India assessing various clinical objectives such as incidence of procedural complications and major adverse cardiac

* Corresponding author. Cardiology, JIPMER, Puducherry, 605006, India.
E-mail address: ajithananthu@gmail.com (A.A. Pillai).

https://doi.org/10.1016/j.ihj.2018.12.003

Original Article

A study on usefulness of modified medication adherence scale in assessing adherence among hypertensive patients

Sethu Prabhu Shankar, I. S. S. Suman Babu, Neelakandan Ramya

Department of General Medicine, Aarupadai Veedu Medical College and Hospital, Puducherry, India

Abstract

Background: Adherence to medication is important for control of blood pressure (BP) and prevention of its complications. Identifying factors which improve adherence to treatment helps in improving cardiovascular outcome.

Aim: The aim is to study the adherence of hypertensive patients to medication using modified medication adherence scale (MMAS).

Materials and Methods: This study was done as a cross-sectional study in the Department of General medicine in Aarupadai Veedu Medical College and Hospital, Puducherry, from May 2017 to October 2017. All adult patients of both sexes diagnosed to have hypertension were included in the study after obtaining informed consent. Adherence to hypertension was assessed using MMAS and results were analyzed. SPSS 22 software (International Business Machines Corporation, Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY) was used for statistical purposes.

Results: A total of 150 patients were included in the study. There were 83 males and 67 females in the study. Good adherence was observed in 74 (49%) out of the total 150. Forty-nine (59%) males and 25 (37%) females were found adherent to treatment. Patients with monotherapy had a good adherence compared to those with polytherapy. Patients with good adherence had a good control of BP.

Conclusion: MMAS is a simple and useful tool for assessing medication adherence among hypertensive patients.

Keywords: Adherence, blood pressure, hypertension, modified medication adherence scale

Address for correspondence: Dr. Neelakandan Ramya, Department of General Medicine, Aarupadai Veedu Medical College and Hospital, Puducherry, India.
E-mail: dr.ramyamd@yahoo.com

INTRODUCTION

Mean systolic blood pressure (BP) of more than 140 mmHg or above, mean diastolic pressure of 90 mm Hg or above, defines hypertension.[1] Hypertension doubles the risk of cardiovascular diseases, including coronary heart disease, congestive heart failure, ischemic and hemorrhagic stroke, renal failure, and peripheral arterial disease. It is often associated with additional cardiovascular risk factors and the risk of cardiovascular disease increases with the total burden of risk factors.[2] Poor adherence is associated with higher residual cardiovascular risk and a high health-care burden.[3] In approximately half of the cases, uncontrolled hypertension has been attributed to patients' failure to follow properly a prescribed drug regimen.[4]

MATERIALS AND METHODS

This cross-sectional single-visit study was done in Aarupadai Veedu Medical College and Hospital,

Access this article online

Quick Response Code:

Website: www.picronline.org

DOI: 10.4103/picr.PICR_44_18

How to cite this article: Shankar SP, Suman Babu IS, Ramya N. A study on usefulness of modified medication adherence scale in assessing adherence among hypertensive patients. Perspect Clin Res 2019;10:163-7.

International Journal of Advances in Medicine
Janakiraman S et al. Int J Adv Med. 2019 Aug;6(4):1293-1298
http://www.ijmedicine.com
pISSN 2349-3925 | eISSN 2349-3933
DOI: http://dx.doi.org/10.18203/2349-3933.ijam20193288

Original Research Article

Hypovitaminosis D and effect of vitamin D supplementation in type 2 diabetes mellitus: a rural population based study

Sathiyanarayanan Janakiraman, Girija Subramanian*

Department of General Medicine, Sri Manakula Vinayagar Medical College, Kalitheerthalkuppam, Puducherry, India

Received: 08 May 2019
Accepted: 10 June 2019

***Correspondence:**
Dr. Girija Subramanian,
E-mail: girijagops@gmail.com

ABSTRACT

Background: Deficiency of Vitamin D in general population and its association with various disease conditions have been studied worldwide. Type 2 Diabetes mellitus is increasing at an alarming rate in Indian subcontinent, contributing to increased morbidity and mortality. This study aimed to estimate level of Vitamin D and its association with patients with type 2 diabetes mellitus of rural origin. This study objective was to estimate the Vitamin D level of patients with Type 2 Diabetes mellitus and the effect of Vitamin D supplementation on glycemic status.

Methods: This study was conducted at the Department of General medicine for a period of 1 year. Eighty patients with type 2 Diabetes mellitus were recruited in the study and baseline parameters of glycemic control and Vitamin D levels were assessed. Only 36 patients complied with the recommendation and evaluated further.

Results: All the patients included in the study had insufficient or deficient levels of Vitamin D. The mean vitamin D levels before and after supplementation were 17.75±6.30 and 29.33±6.34 respectively. The mean plasma HbA1c level before and after supplementation were 7.78 and 7.30 respectively. Patients after vitamin D replacement showed significant improvement in their glycaemic status.

Conclusions: Vitamin D supplementation of 2000 IU/day had shown to improve the glycaemic status. The beneficial effect of Vitamin D on diabetes was evident in a short period of supplementation.

Keywords: Diabetes mellitus, Glycemic status, Vitamin D deficiency, Vitamin D supplement

INTRODUCTION

Vitamin (Vit) D is crucial for metabolism of calcium and its homeostasis. It is estimated that 1 billion people worldwide have vitamin D deficiency or insufficiency. Vit D deficiency is still an undertreated nutritional disorder. Vit D deficiency has been noted in 70-100% of healthy persons. There is a varying degree (50-90%) of Vitamin D deficiency with low dietary calcium intake in Indian population according to a study published by Londhey V.[1] Apart from low dietary intake, people suffering from hepatic, renal, dermatological disorders, alcoholics and inflammatory rheumatologic conditions also have Vitamin D deficiency. A growing number of studies have reported widespread vitamin D deficiency and insufficiency in both apparently healthy population and patients with various pathologies.[2] Type 2 Diabetes mellitus (DM) which is increasing at an alarming rate in developing countries like India is a major public health problem accounting for significant morbidity and mortality. The prevalence of Diabetes Mellitus in India is estimated to be around 62.4 million cases in a recent study.[3] Low levels of vitamin D have been associated with an increased risk of cardiovascular mortality in the general population as well as in patients with type 2 Diabetes mellitus.[4,5]

The prevalence of Diabetes mellitus is high in Southern parts of India but there is a paucity of literature regarding the association of Vitamin D and diabetes mellitus.

International Journal of Research and Review
www.ijrrjournal.com E-ISSN: 2349-9788; P-ISSN: 2454-2237

Original Research Article

The Study of Proportion and Molecular Characterisation of *Helicobacter pylori* in Dyspeptic Patients in Sri Manakula Vinayagar Medical College and Hospital

Dr. M. K. Uthaya Sankar[1], Dr. S. Yogesh[2], Dr. K. Shenbagaram[3], Dr. R. Hanushraj[3], Dr. P. Thirumal[4]

[1]Professor, [2]Post Graduate, [3]Assistant Professor,
Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry- 605107, India
[4]Assistant Professor, Department of Gastroenterology, Sri ManakulaVinayagar Medical College and Hospital.

Corresponding Author: Dr. S. Yogesh

ABSTRACT

Background: *Helicobacter Pylori* is the colonized in humans over 100,000 years, the prevalence of H.Pylori in different in various parts of the world. Complications of the organism are varies. This study helps in proportion of H.pylori in the patients attending in tertiary hospital.
Aims: 1. The study of proportion of Helicobacter pylori in dyspepsia.
2. Molecular characterisation of Helicobacter pylori in dyspeptic patients in Sri Manakulavinayagar Medical College and Hospital.
Methodology: A Hospital based cross section study conducted in Department of General Medicine. The study period was about one and half year after obtaining the ethical committee approval. The study population is of 95 who are came with the complaint of dyspepsia diagnosed by Rome category, patients underwent upper gastro endoscopy tissue sample obtained sent for histopathology staining, Urease test, PCR test.
Results: Among the study participants, histopathology report for H.pylori positive for 19 out of 95 participants, percentage 20.0%.Urease report is positive for 22 out of 95 participants, percentage 23.16%.Among the histopathology positive for H.pylori in study participants, PCR for VacA Gene is positive in 10 out of 19 study participants, percentage 52.63%.
P valve = 0.001 in Histopathology report, P valve = 0.003 in Urease report, P valve = <0.01 in PCR report. P value <0.05 will be considered statistically significant.
Conclusions: H.pylori infections cause gastro-duodenal ulcers, carcinoma, MALT lymphoma. Identifying and treating the infection is important. Patients with VacA gene positive in this study can be treated with four drug regimens.

Keywords: Helicobacter pylori, dyspepsia, Histopathology test, Urease test, PCR test.

INTRODUCTION

H. pylori is a gram-negative bacillus that has naturally colonized humans for at least 100,000 years. [1] The prevalence of this infection varies world widely as low as 10 percent in developed western nations to higher than 80 per cent among the indigent populations of many developing countries it is estimated that more than 20 million are affected in India. [2]

A working group of the World Health Organization's International Agency for

JMSCR Vol||07||Issue||04||Page 202-204||April 2019

www.jmscr.igmpublication.org
Index Copernicus Value: 79.54
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i4.36

Journal Of Medical Science And Clinical Research

Multiple Endocrinopathies in a Young Female – A Case Report

Authors
Dr M Mohammad Inaamul Hassan[1]*, Dr Nagarajan K[2], Dr Jalaja Maneri[3], Dr Kadhiravan Ejilane[4]

[1]Final year PG Resident, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Pondicherry
[2]Professor, Department of General Medicine, SMVMCH
[3]Assistant Professor, Department of General Medicine, SMVMCH
[4]Senior Resident, Department of General Medicine, SMVMCH
Corresponding Author
Dr M Mohammad Inaamul Hassan,
Room no. 18, Boys hostel (PG Quarters), Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Kalitheerthalkuppam, Madagadipet, Pondicherry – 605107
Ph no: 09791788778/ 0431-2791833, Email: *dr.mdinhassan@gmail.com*

Abstract
Autoimmune polyendocrine/ polyglandular (APS) syndromes are constellations of multiple endocrine gland insufficiencies, of whom there are 3 types, and amongst which APS type II is the most common. APS type III is defined by the presence of an autoimmune thyroid disease and other autoimmune illnesses, excluding Addison's disease. In our case report here, we present a case of a 22 year old young female from South India with multiple endocrine disorders which come under the category of PGA syndrome type III C, with a few disorders more than the usual endocrinopathies which are included in type III PGA syndromes.
Keywords: *Autoimmune polyendocrine/ polyglandular syndromes (APS), hypothyroidism, type I diabetes mellitus, alopecia, primary amenorrhea, dyslipidemia, bronchial asthma.*

Introduction

Autoimmune diseases are among the most perplexing of human illnesses.[1] In APS (Autoimmune polyendocrine/ polyglandular syndrome) type III, autoimmune thyroiditis occurs with another organ-specific autoimmune diseases; but the syndrome cannot be classified as APS types I or II due to the absence of Addison's disease. Cases of APS type III associated with different immunological or genetic disorders have been sporadically reported. Premature ovarian failure (POF) is more prevalent than AD (1,000 per 100,000 women), but only 5% of cases are of an autoimmune origin [2,3] In our case report, we are presenting a 22 year old female who has alopecia, primary ovarian failure, dyslipidaemia and bronchial asthma alongside hypothyroidism and type-1 diabetes mellitus. This is another peculiar presentation of the APS type III.

Case Report

A 22 year old female was brought to our casualty unconscious, and was found to be hypoglycaemic which on probing was found that she had been

JMSCR Vol||07||Issue||08||Page 342-351||August 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i8.59

Journal Of Medical Science And Clinical Research

Study of Clinical profile and Antibiotic susceptibility of Urinary Tract Infection in a Tertiary Care Hospital

Authors
Dr J. Louis Ferdin Zeno[1], Dr M. K. Uthaya Sankar[2*], Dr R. Gopal[3], Dr I. S. Suman Babu[4]
[1]Postgraduate, [2,3]Professor, [4]Assistant Professor
Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India
*Corresponding Author
Dr M.K. Uthaya Sankar

Abstract

Introduction: *Urinary tract infection (UTI) is one of the most common infectious disease for which Treatment is often started empirically. The etiology and the antimicrobial susceptibility for UTI have been changing over the years.*

Objective: *To know about the clinical and microbiological profile of urinary tract infection among patients admitted in Sri Manakula Vinayagar Medical College and Hospital.*

Methodology: *We conducted a cross sectional study among patients who were diagnosed as UTI based on urine culture. The commonest organism and their antibiotic susceptibility was studied. Ultrasonography (USG) abdomen and pelvis was done to find out any structural abnormalities and complications.*

Results: *Out of the 40 patients studied, fever(85%) was the most common presenting symptom and Escherichia coli(57.50%) was the most common organism isolated followed by Klebsiella (15%). The most sensitive antibiotic was meropenem (75%) and the most resistant antibiotic was cefazolin(87.50%). These results were found to be statistically significant.*

Conclusion: *A higher percentage of resistant organisms against the commonly used antibiotics alarm about the indiscriminate use of antibiotics. Hence empirical antibiotic selection should be based on the knowledge of local prevalence of bacterial organisms and their antibiotic sensitivity to avoid the development of resistance.*

Keywords: *Urinary tract infection (UTI), organisms, antibiotic sensitivity and resistance.*

Introduction

Urinary tract infection (UTI) is one of the most common infectious disease seen in the community.[1] UTI may be asymptomatic or symptomatic. It includes asymptomatic bacteriuria, cystits, prostatitis, pyelonephritis. Uncomplicated UTI refers to acute cystitis or pyelonephritis in non-pregnant women or men without anatomical abnormalities or instrumentation of the urinary tract. The term complicated UTI encompasses all other types of UTI.[2] It is more common in females than in males.[2]

The estimated annual global incidence is 250 million.[3] Community associated UTI prevalence is 0.7% and health care associated UTI is 24% in

JMSCR Vol||07||Issue||07||Page 44-47||July 2019

http://jmscr.igmpublication.org/home/

ISSN (e)-2347-176x ISSN (p) 2455-0450

crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i7.09

Journal Of Medical Science And Clinical Research

An Official Publication Of IGM Publications

A case of Mixed Connective Tissue Disease with Right Heart Failure

Authors

Dr Venkatesh R[1*], Dr Nagarajan K[2], Dr Anand P[3]

[1]Post-Graduate, Department of General Medicine, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Puducherry 605107

[2]Professor and Chief, Department of General Medicine, SMVMCH

[3]Assistant Professor, Department of General Medicine, SMVMCH

*Corresponding Author

Dr Venkatesh R

Final year post graduate, Department of General medicine

Room no 12, SMVMCH medical boys PG hostel, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Kalitheerthalkuppam, Puducherry 605107, India

Abstract

Background: *Sharp and colleagues in 1972 was first described the Mixed connectivetissue disease (MCTD).They described MCTD in a group of people havingwith overlapping clinical features of scleroderma, myositis and systemic lupus erythematosus (SLE) with the presence of a specific antibody against U1-ribonucleoprotein (RNP).[1] Sharp's syndrome is the other name for MCTD.[2] It is more common in females than males. Estimations of the female to male ratio varies from approximately 3:1 to 16:1.[3,4]It is typically occuring between 15-25 years oldbut it can occur at any age but in our country has rarely been reported but here by reported rare presentation of MCTD occurs in 65 years old female.*

Keywords: *Mixed connective tissue disease; Pulmonary hypertension; Extractable nuclear antigen.*

Introduction

Mixed connective tissue disease is the systemic inflammatory rheumatic disease very uncommon. If the patient has features of more than one classical inflammatory rheumatic disease then it is categorized under rheumatic "overlap syndromes". It is the specific subset of MCTD. Mixed connective tissue disease can occur in any age from childhood to adulthood. 37 years is the average age of disease onset. Approximately 75 percent of individuals affected are females. In Norway MCTD has been found to be 3.8 per 100,000 adults.[3] These classic rheumatic diseases includepolymyositis, scleroderma, rheumatoid arthritis and systemic lupus erythematosus. Laboratory result distinguishes MCTD from other overlap syndromes. Patients of MCTD have rheumatic overlap syndrome plus anti-RNP antibodies.[5]

Case Report

A 65 years old female, came with thecomplaints of difficulty in breathing and swallowing, palpitations, giddiness, swelling of hands, right shoulder pain, cough with expectoration, and oral dryness with co-morbidities such as Type II

JMSCR Vol||07||Issue||07||Page 375-377||July 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i7.69

Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publications

Copper myeloneuropathy

Authors

Dr S.Vignesh[1*], Dr Nagarajan K MD[2], Dr Anand P MD[3]

[1]Post-Graduate, Dept. of Medicine, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Puducherry 605107

[2]Professor and HOD, Dept. of Medicine, SMVMCH

[3]Assistant Professor, Dept. of Medicine, SMVMCH

*Corresponding Author

Dr S.Vignesh

Post-Graduate, Dept. of Medicine, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Puducherry 605107, India

Abstract

Myeloneuropathy is a frequently encountered condition and often poses a diagnostic challenge[1]. Myeloneuropathy arises from a variety of nutritional, toxic, metabolic, infective, inflammatory, and paraneoplastic disorders[2]. Vitamin B12, folic acid, copper, and vitamin E deficiencies may lead to myeloneuropathy resembling as that of subacute combined degeneration of the spinal cord[6]. Chikungunya viral infection has been shown to produce a syndrome similar to myeloneuropathy. Human immunodeficiency virus (HIV) infection may resemble subacute combined degeneration[9]. Magnetic resonance imaging (MRI) in subacute combined degeneration of the spinal cord typically reveals characteristic signal changes on T2-weighted images of the cervical spinal cord. Once myeloneuropathy diagnosis is suspected, all these patients should be subjected to a battery of tests[11]. Vitamin B12, folic acid, vitamins A, D, E, and K serum levels along with levels of iron, methylmalonic acid, homocysteine, and calcium should be assessed[13]. Clinical features resembling myeloneuropathy along with the battery of biochemical tests often helps in establishing the correct diagnosis.

Keywords: *Myeloneuropathy, Posterolateral syndrome, Demyelination.*

Introduction

Copper deficiency may lead to anaemia, neutropenia and ringed sideroblasts in the bone marrow[5]. Copper deficiency may also lead to myelopathy presenting with a spastic gait ataxia and sensory ataxia. It may also be associated with myopathy, demyelination, peripheral neuropathy[8]. Increase in signal intensity in T2 weighed images that involve the dorsal column is seen in copper myeloneuropathy[3]. Nerve conduction studies may show varying degrees of peripheral neuropathy picture[15].

Case Report

A 15 -year-old girl came to OPD with complaints of lower limb numbness and gait unsteadiness for 3 months. These symptoms rapidly worsened a week back and she lost the ability to ambulate and stand independently. Bowel, bladder and cognitive functions were normal. The patient's mental status, speech and language were normal. Cranial nerve examination were normal. Her distal lower limb muscles were weak comparatively than her proximal limb muscles. Deep tendon reflexes were brisk in the lower limbs. Joint position sense

JMSCR Vol||07||Issue||03||Page 1306-1310||March 2019

www.jmscr.igmpublication.org
Index Copernicus Value: 79.54
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i3.220

Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

Lipid Pattern of Chronic Kidney Disease Patients on Hemodialysis and on Conservative Management- A Comparative Study

Authors
Dr Raghu Rama Reddy .A[1], Dr Girija .S[2*], Dr Ravi Kumar .P[3]
[1]Junior Resident, Department of General Medicine, SMVMCH, Kalitheerthalakuppam, Puducherry 605107, India.
Email: *aaluriraghu@gmail.com*
[2]Associate Professor, Department of General Medicine, SMVMCH, Kalitheerthalakuppam, Puducherry 605107, India
[3]Consultant Nephrologist, SMVMCH, Kalitheerthalkuppam, Puducherry 605107, India
Email: *ravi.pkr@gmail.com*
*Corresponding Author
Dr Girija .S
Email: *girijagops@gmail.com*

Abstract
Introduction: Chronic renal failure (CRF) is an irreversible condition, which is indicated by significant reduction in glomerular filtration rate, or irreversible destruction of kidney tissue.1 CRF is characterized by a wide variety of biochemical disturbances and numerous clinical symptoms and signs. Plasma cholesterol levels are usually normal in uraemia but elevated after renal transplantation. In renal failure, these abnormalities of carbohydrate and lipid metabolism presumably contribute to increased risk of atherogenesis, which may be troublesome in patients receiving long-term dialysis.8,9.
Thus the present study was conducted to compare the lipid profile in chronic kidney disease patients on regular hemodialysis and on conservative management
Materials and Methodology: *A Hospital based case control study was conducted in Sri Manakula Vinayagar Medical College and Hospital, kalitheerthalkuppam for a period of 6 months, from May'2017 to October'2017. Patients who were diagnosed with Chronic Kidney Disease and admitted into the medical wards were included in the study. Patients with already known diabetes mellitus, ischemic heart disease, patients who had undergone coronary artery bypass graft, on lipid lowering drugs and history of alcohol consumption and smoking were excluded, from the study. Fasting lipid profiles of patients of chronic kidney disease on conservative management (group-I) and on hemodialysis (group-II) were compared.*
Results: *A total of 80 patients participated in the study. The mean age of the CRF patients was 53.25± 11.04 years. The mean age in our study among the group I participants (40) was 54.41± 10.86 years and in group II (40) it was found to be 51.87 ± 11.23 years. This study showed that total cholesterol, triglycerides, HDL, LDL, VLDL were significantly lower in the CRF patients on regular hemodialysis ($p< 0.05$). Total cholesterol, triglycerides and VLDL were significantly higher among female gender with p value < 0.05*
Conclusion: *Chronic kidney disease, due to its alteration in carbohydrate and lipid metabolism can lead on to increased atherogenesis and contribute to mortality. This necessitates the periodic monitoring and maintenance of lipid profiles within recommended range in CKD patients not on hemodialysis also.*

Introduction

Chronic renal failure (CRF) is an irreversible condition, which is indicated by significant reduction in glomerular filtration rate, or irreversible destruction of kidney tissue. In renal failure, dyslipidemia contribute to increased risk

JMSCR Vol||07||Issue||12||Page 208-214||December 2019

http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i12.36

Journal Of Medical Science And Clinical Research

Asymptomatic bacteriuria in patients with Type-2 Diabetes mellitus

Authors
Dr Mythreini B S[1], Dr M. K. Uthaya Sankar[2*], Dr R. Gopal[3], Dr I. S.S. Suman Babu[4]
[1]PG Resident, [2]Professor of Medicine, [3]Professor of Microbiology, [4]Assistant Professor
Department of General Medicine
Sri Manakula Vinayagar Medical College and Hospital, Puducherry-605107, India
*Corresponding Author
Dr M.K. Uthaya Sankar

Abstract

Introduction: *Asymptomatic bacteriuria is a common problem in patients with diabetes mellitus it is more common in females if untreated it leads to life threatening complications like pyelonephritis, emphysematous cystitis, perinephric abscess and renal papillary necrosis.*

Objective: *This study was conducted to know the prevalence and clinical profile of asymptomatic bacteriuria in patients with diabetes*

Methodology: *Type-2 DM patients with asymptomatic urinary tract infection was selected and urine culture, antibiotic sensitivity pattern was studied.*

Results: *Among 80 diabetics patients 46(57.5%) had asymptomatic bacteriuria. Escherichia coli were the most prevalent organism and was sensitive to Nitrofurantoin in 89.5% cases and meropenem in 68.4% cases.*

Introduction

Diabetes mellitus is a common metabolic disorder characterised by variable degrees of insulin resistance, impaired insulin secretion and increased glucose production. According to WHO India had 69.2 million people living with diabetes in 2015. Nearly 98 million people in India may develop type-2 diabetes by 2030. Diabetes produces various complications like diabetic ketoacidosis, hyperosmolar nonketotic hyperglycaemia, lactic acidosis, microvascular (neuropathy, nephropathy, and retinopathy) and macrovascular complication (cerebrovascular accident, cardiovascular disease, and peripheral vascular disease). Diabetic patients have an increased risk of infections, especially urinary tract infection is the most frequent site. Urinary tract infection may be symptomatic and asymptomatic. Many urinary tract infections are asymptomatic and whether symptomatic urinary tract infections are preceded by asymptomatic bacteriuria. Urinary tract infections are likely to be more severe in diabetic than non-diabetic patients.

Asymptomatic bacteriuria is defined as $>10^5$ colony forming unit (CFU) per ml of 1 or 2 bacterial species in clean voided midstream urine sample from an individual without symptoms of a urinary tract infection like dysuria, frequency, urgency, abdominal pain, and fever. Some studies showed that prevalence of ASB was detected in 33.2% of participants; 38.3% in diabetics and

ORIGINAL RESEARCH PAPER

General Medicine

CORRELATION OF ACANTHOSIS NIGRICANS AND ACROCHORDONS WITH INSULIN RESISTANCE- A CASE CONTROL STUDY.

KEY WORDS: Acanthosis nigricans, acrochordons, insulin resistance, HOMA-IR

Dr Girija Subramanian — Associate professor, Department of General Medicine, Sri Manakula Vinayagar Medical College, Kalitheerthal kuppam ,Puducherry ,India 605107.

Dr Tukuntla Vishwa Teja* — Assistant professor, Department of General Medicine, Malla Reddy Medical College for Women's, Hyderabad. *Corresponding Author

Dr. Kaliaperumal Karthikeyan — Professor & Head ,Department of Dermatology, Sri Manakula Vinayagar Medical College, Kalitheerthalkuppam, Madagadipet, Puducherry 605107, India

ABSTRACT

Introduction: Insulin resistance shown to be associated with and even precede cardiovascular diseases, diabetes mellitus and metabolic syndrome could be identified by cutaneous markers of insulin resistance namely, Acanthosis nigricans and Acrochordons.

Objective: The aim was to assess the presence of cutaneous lesions and relate with Insulin resistance.

Materials and methods: A total of 80 patients (40 cases and 40 controls) had their BMI, Waist Hip ratio (WHR), lipid profile, fasting glucose levels and fasting insulin levels checked, HOMA-IR was calculated and correlation between skin lesions and insulin resistance was evaluated.

Results: The mean age of the participants was 44 years (range 20-70) with a female preponderance. The mean BMI in cases was 26.19 +4.1 and in controls 23.60+ 2.8. This shows the significant risk by odds ratio of 2.07 times. The mean WHR in cases showed the significant risk by odds ratio of 1.87 times. The mean total cholesterol value in cases with odds ratio of 1.13 and the mean LDL cholesterol value in cases with odds ratio of 1.78 showed a significant risk. The mean HOMA-IR values in cases with odds ratio of 1.88 showed that individuals with HOMA-IR more than 1.7 have 1.88 times risk of developing skin lesions i.e. Acanthosis and Acrochordons.

Conclusion: This study shows a significant risk association between skin lesions and insulin resistance .

INTRODUCTION:

Insulin resistance is a metabolic disorder in which target cells fail to respond to normal levels of circulating insulin, resulting in compensatory hyperinsulinemia by the pancreatic β cells. Insulin resistance syndrome denotes the cluster of abnormalities that manifest in different tissues leading to abnormalities with serious clinical consequences, including cardiovascular disease and type2 diabetes mellitus, polycystic ovary syndrome, non-alcoholic fatty liver disease[1],other illnesses like malignancies, metabolic syndrome X, accelerated atherosclerosis, systemic hypertension, and various cutaneous lesions like Acanthosis nigricans,skintags,hirsutism, acne and papillosis of finger.

Acanthosis nigricans (AN) is a dermatosis characterized by velvety, papillomatous, brownish-black, hyperkeratotic plaques found typically on the intertriginous surfaces and neck. The majority (80%) of AN occurs idiopathically or in benign conditions such as endocrinopathies like diabetes mellitus, polycystic ovary syndrome; metabolic syndrome and/or hepatic disease. Malignancy-associated AN is rare. It is observed that most patients with Acanthosis nigricans have either clinical or biochemical insulin resistance.[2]

Acrochordons (skin tags) are small, soft, benign skin tumors that are seen most often on the sides of the neck or groin, and occasionally on the thorax varying in diameter from 1 to 6 mm. Deepa et al in their study on prevalence of insulin resistance syndrome in selected South Indian population- CUPS-7 have shown that the overall prevalence of insulin resistance syndrome was 11.2%.[3] Studies have shown that there is strong association between insulin resistance and multiple skin tags irrespective of other risk factors.[4] Insulin resistance stimulates insulin secretion, which in turn stimulates IGF-1 receptors of keratinocytes leading to epidermal growth. So these cutaneous markers could be an indicator of insulin resistance status.[5]

Insulin resistance is shown to be the basis for development of glucose intolerance including diabetes and Coronary artery disease (CAD). Insulin resistance has been detected 10 to 20 years before developing diabetes in individuals who are offspring of patients with type 2 diabetes.[6] Skin manifestations of insulin resistance (e.g., acrochordons, acanthosis nigricans, androgenetic alopecia, acne, hirsutism) have shown to be to a reliable, easy and way of detecting insulin resistance.[7]

Aims and objectives:

The objectives of the study are as follows:

1) To detect the correlation between cutaneous lesions like (Acanthosis nigricans and Acrochordons) with Insulin resistance.
2) To relate severity of cutaneous lesions with insulin resistance.

MATERIAL AND METHODS:

The study was a hospital based , case control (age and sex matched) study conducted in the outpatient departments of General medicine and Dermatology of Sri Manakula Vinayagar Medical College Puducherry after clearance from Research and ethical committee.

A total of 80 patients were included in the study -40 cases and 40 controls .This study was conducted over a period of 12 months. Adult patients more than 18 years of age were included in the study after getting informed consent from the patients.

Case definition:

Cases were defined as patients with various grades of Acanthosis nigricans. The lesions of acanthosis nigricans were graded using a scale by Burke[8] etal.[9]Patients with acrochordons were graded by using a grading scale by Kahana M, El Sebaay et al using the number, size, site, and color of lesions.[10] The grading of lesions was verified by a senior dermatologist.

Control definition:

Controls were defined as age and sex matched patients

Submitted : 24th May, 2019 | Accepted : 19th July, 2019 | Publication : 15th September, 2019

Original Article

Coronary risk prediction by the correlation of total cholesterol/high-density lipoprotein, triglyceride/high-density lipoprotein, low-density lipoprotein/high-density lipoprotein ratios, non-high-density lipoprotein, apolipoprotein-B, and high-sensitivity C-reactive protein with low-density lipoprotein in Indian patients under statin therapy

ABSTRACT

Background: Patients are treated with statins for the control of cholesterol but statins control only low-density lipoprotein (LDL) and not non-high-density lipoprotein (non-HDL). Also, LDL is not a good coronary risk predictor. That creates the necessity to find a better biomarker for future coronary risk prediction. Hence, biomarkers under this territory such as total cholesterol (TC)/HDL, LDL/HDL, triglyceride (TG)/HDL ratios, non-HDL, apolipoprotein-B (apo-B), and high-sensitivity C-reactive protein (hs-CRP) were to be assessed and correlated with LDL to find the better biomarker in Indian patients.

Objective: The objective was to study non-HDL, apo-B, TC/HDL, TG/HDL, LDL/HDL ratios, and hs-CRP in patients under statin therapy; and to correlate them with their LDL; to predict the risk of future coronary events; and to identify which biomarker among them is better at detecting the same.

Materials and Methods: This is a cross-sectional observational study performed by systematic random sampling among 87 patients under statin therapy, and the levels of LDL, TC/HDL, LDL/HDL, TG/HDL ratios, non-HDL, apo-B, and hs-CRP were measured in such patients, and their correlation with optimized and unoptimized LDL groups were done. Continuous data were represented as mean and standard deviation, and *P* value was calculated using independent *t* test or *z* test.

Results: Non-HDL, TC/HDL, and LDL/HDL ratios were found to be statistically significant – all three parameters with $P < 0.0001$ in predicting the coronary artery disease attacks in the future.

Conclusion: Even though all patients in our study were under statin therapy, they are still under the risk of developing coronary events. This can be solved by targeting the control of non-HDL or TC/HDL or LDL/HDL ratios, as they are found be better biomarkers for future coronary risk prediction.

Keywords: Apolipoprotein-B, cholesterol, coronary artery disease, low-density lipoprotein, non-high-density lipoprotein, statin, total cholesterol/high-density lipoprotein, triglyceride/high-density lipoprotein, and low-density lipoprotein/high-density lipoprotein ratios

Badrinath AK, Nagarajan K, Anand P, Suresh Babu S, Asmathulla S[1], Mohammad Inaamul Hassan M

Departments of General Medicine and [1]Biochemistry, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Address for correspondence: Dr. Mohammad Inaamul Hassan M, C. 152, Kannadasan Street, Annanagar, Tennur, Trichy - 620 017, Tamil Nadu, India.
E-mail: dr.mdinhassan@gmail.com

INTRODUCTION

Asian Indians, whether living in India or elsewhere, have a higher incidence of developing coronary artery

Access this article online	
Website: www.heartindia.net	Quick Response Code
DOI: 10.4103/heartindia.heartindia_2_19	

How to cite this article: Badrinath AK, Nagarajan K, Anand P, Babu SS, Asmathulla S, Hassan MM. Coronary risk prediction by the correlation of total cholesterol/high-density lipoprotein, triglyceride/high-density lipoprotein, low-density lipoprotein/high-density lipoprotein ratios, non-high-density lipoprotein, apolipoprotein-B, and high-sensitivity C-reactive protein with low-density lipoprotein in Indian patients under statin therapy. Heart India 2019;7:83-7.

Original Research Article http://doi.org/10.18231/j.ijirm.2019.018

A study of role of interleukin-8 in differentiating transudative and exudative pleural effusion

Abarna Devi Sanmarkan[1], Badrinath AK[2], Suresh Babu S[3], Anand P[4]*

[1,3,4]Assistant Professor, [2]Professor, Dept. of General Medicine, [1]ESIC Medical College & PGIMSR, Chennai, Tamil Nadu, [3,4]SMVMCH, Puducherry, India

***Corresponding Author: Anand P**
Email: dr.anandprasanna@gmail.com

Abstract

Background: Differentiation between transudative and exudative effusion is considered the initial step in the etiological diagnosis of any pleural effusion. The differentiation is essential, since the treatment of underlying systemic cause is enough in transudative pleural effusion, whereas extensive investigations and treatment is required in exudative effusion. Recent studies have demonstrated the existence of a novel neutrophil activating peptide first named NAP-1, but subsequently renamed IL-8. Interleukin-8 being the mediator of local inflammation may help in the differentiation of transudates and exudates.

Methodology: This is a hospital based cross sectional study which included 70 patients with pleural effusion. After diagnosing pleural effusion, they were further divided into two categories, namely transudate and exudate based on Light's criteria.

The concentration of pleural fluid interleukin-8 was determined by an Enzyme Linked Immunosorbent Assay (ELISA) method by using commercially available assay kits.

Statistical Analysis: All results are expressed as mean ± standard deviation (SD) for continuous variables and as frequencies for categorical variables. The difference in the age and gender between groups is disproved using independent student t-test and chi-square test. Mean pleural fluid Interleukin-8 level between the groups is analyzed using independent student t-test.

Results: The parameters in Light's criteria (pleural fluid protein and LDH) and Interleukin 8 were able to differentiate transudate from exudate and were found to be statistically significant with p value of < 0.001.

Conclusions: It is clear from our study that IL-8 can be used to diagnose and differentiate exudates from transudative pleural effusions with a good sensitivity and specificity.

Keywords: Pleural effusion, Interleukin 8, Exudative effusion, Transudative effusion, Empyema.

Introduction

In cases of pleural effusion, identifying the type is very important to arrive at the etiological cause. Transudative effusions are due to an imbalance between the hydrostatic and oncotic pressures in the systemic or pulmonary circulation. Exudates are produced by increased vascular permeability. Transudates are most often caused by heart failure (80%) and, to a lesser extent, by hepatic cirrhosis. In 80% of cases, the exudate is secondary to malignancy (secondary or primary), pneumonia, tuberculosis or viral pleuropericarditis [1,2].

Pleural effusions are classified as transudates or exudates by Light's criteria which has been in use for a long time. The differentiation is essential, since the treatment of underlying systemic cause is enough in transudative pleural effusion, whereas extensive investigations and treatment is required in exudative effusion. The sensitivity of Light's criteria is between 94% to 100% and specificity is 57% to 85%. In case of improper diagnosis or partial treatment, the uncomplicated pleural effusions can become a complicated, characterized by deposits of fibrin and microorganisms in the pleural fluid. So there has been search for a novel biomarker which can differentiate between transudates and exudates more accurately [3,4].

Recent studies have demonstrated the existence of a novel neutrophil activating peptide first named NAP-1 but subsequently renamed IL-8. Interleukin-8 being the mediator of local inflammation may help in the differentiation of transudates and exudates. Levels in pleural effusion have been studied in very few researches. In view of achieving a specific diagnosis as well as to differentiate between transudates and exudates we would like to assess the role of IL- 8 in pleural effusion [5-7]. The cut off values of IL-8 levels with different aetiologies were detected from various studies as shown in table 1.

Table 1: Cut off values of IL-8 levels with different etiologies from various studies

Normal	5 pg/ ml
Exudative	3068.5+/- 1762.7
Parapneumonic effusion	1884.5 +/- 366.7
Tuberculous	1420 +/- 1049
Malignancy	1574 +/- 1079
Transudates	108.8 +/- 92.0

Materials and Methods

This is a tertiary care hospital based cross sectional study which included 70 patients with pleural effusion. Patients were included in the study after getting informed consent from the patient and patient's attender. Also, an ethical committee approval was obtained. Clinical history was elicited and physical examination was performed. Pleural effusion was confirmed based on the chest X-ray finding. USG thorax/CT thorax was taken if the effusion was loculated or minimal. After diagnosing pleural effusion, they were further divided into two categories, namely transudate and exudate based on Light's criteria. Pleural fluid was obtained by diagnostic pleural fluid aspiration (thoracentesis) after informed consent. Determination of biochemical

International Journal of Contemporary Pediatrics
Nair GG et al. Int J Contemp Pediatr. 2020 Apr;7(4):884-890
http://www.ijpediatrics.com

pISSN 2349-3283 | eISSN 2349-3291

Original Research Article

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20201148

Barriers to exclusive breast feeding, the missing links: a cross sectional study from Puducherry, India

Gayathri G. Nair*, Arul Kumaran Arunagirinathan, Nirmal S. R., Rajesh Yadav B.

Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry, India

Received: 26 January 2020
Revised: 03 February 2020
Accepted: 02 March 2020

***Correspondence:**
Dr. Gayathri G. Nair,
E-mail: drgaya3gn@gmail.com

ABSTRACT

Background: Breast milk, the first natural food for a new-born, provides all the energy and essential nutrients an infant requires for the first 6 months of life. The NHFS -4 survey shows only 45.5% of children are exclusively breastfed (EBF) in Puducherry. This study aims at assessing the socio-demographic characteristics associated with exclusive breastfeeding in a tertiary hospital in Puducherry and identify the barriers in the promotion of exclusive breastfeeding.

Methods: Community-based cross-sectional study at a tertiary hospital in Puducherry. Sample size: 115 mothers of 6 months to 2-year-old children, born term gestation with a birth weight of >2.5 kg, attending the Paediatric OPD. Questionnaire-based study comprising of socio-demographic and parameters pertaining to exclusive breast-feeding.

Results: Only 44.3% of the mothers have exclusively breastfed in the first 6 months. Shorter duration of spacing between births and caesarean section had significant negative association with exclusive breast-feeding. Most of the mothers received postnatal counselling on breast-feeding (94%) of which 58% were by health care personnel. Despite that, only a sixth (19%) of them were well versed with proper breastfeeding techniques. Poor secretion (45.3%), sore/inverted nipple (23.5%) amounted to the most common of the barriers. Among working mothers, 42.9% attributed their jobs as the cause for early weaning.

Conclusions: The prevalence of exclusive breastfeeding is still low even among a literate study group. There were no significant association with socio-demographic factors found, but lacunae were identified. A more objective post-natal counselling to mothers involving their caregivers may improve the current scenario.

Keywords: Barriers, Exclusive breastfeeding, Puducherry, Socio-demographic factors

INTRODUCTION

Breast milk, the first natural food for a new-born, provides all the energy and essential nutrients an infant requires for the first six months of life, half of the nutritive requirement for the next six months and thereon one-third of the requirement till two years of age, responsible for the infant's proper physiological growth and development.[1,2] 'Exclusive Breastfeeding' (EBF) implies that nothing else is to be given to the baby except breast milk during the first six months of life.[3] The WHO recommends exclusive breastfeeding for all new-born during the first six months of life.[4]

Breast-feeding, besides providing nutrition, energy, adequate sensory and cognitive development also protects the child from various infections and chronic diseases like obesity, type1/2 diabetes, leukemia and Sudden

International Journal of Contemporary Pediatrics
Nirmal SR et al. Int J Contemp Pediatr. 2019 May;6(3):1386-1390
http://www.ijpediatrics.com

pISSN 2349-3283 | eISSN 2349-3291

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20192050

Case Report

Langerhans cell histiocytosis presenting as isolated central diabetes insipidus in a 2-year-old child: a rare manifestation of rare disease

Nirmal S. R.*, Revathi Krishnakumar, Gayathri G. Nair, Sri Lakshmi Chordia, Arulkumaran Arunagirinathan

Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, Tamil Nadu, India

Received: 24 January 2019
Accepted: 08 March 2019

***Correspondence:**
Dr. Nirmal S. R.,
E-mail: drnirmal2387@gmail.com

ABSTRACT

Central diabetes insipidus, though uncommon in children, has varied causes, the commonest ones being genetic mutations, infiltrative disorders, infections. Isolated central diabetes insipidus is not one of the often encountered conditions in the pediatric practice. Here we report a case of 2 ½ years old female child who presented to us following history of polyuria for 2 months, who was confirmed to have central diabetes insipidus which was later evaluated to be secondary to Langerhans cell histiocytosis. Magnetic resonance imaging (MRI) and histopathological studies further helped in confirmation of the diagnosis. Langerhans cell histiocytosis is a rare, multifarious, and underdiagnosed hematologic disease in which isolated diabetes insipidus can be the sole presenting feature before other manifestations. Hence, this diagnosis could strongly be considered in the work up of central diabetes insipidus in children.

Keywords: Children, Central diabetes insipidus, Langerhans cell histiocytosis

INTRODUCTION

Central diabetes insipidus (CDI) presents commonly secondary to infections like meningitis, post trauma or any neurosurgical intervention and this wide differential diagnosis substantiates the need for proper workup of this condition.[1] Langerhans cell histiocytosis (LCH) is also an uncommon condition in children with a slight male preponderance.[1] It can affect almost any organ and present with varied clinical manifestations.[2] LCH may be associated with CDI during the course of the disease, however presenting as isolated Diabetes Insipidus (DI) as an inaugural manifestation is quite rare.[2] A focused work up along with magnetic resonance imaging (MRI) modality with classical findings justify the involvement of the hypothalamic-pituitary axis leading to the aforesaid presentation.[3] This supplemented with histopathological evidence will help to confirm the diagnosis. Hence, authors report this case with such an isolated presentation, which was evaluated and diagnosed at our tertiary care center.

CASE REPORT

A 2 ½ years old female, first order child to non-consanguineous parents was brought with polyuria, polydipsia and weight loss for 2 months. On examination she was moderately nourished, hydration was normal, heart rate-108/minute, respiratory rate-28/min, blood pressure-96/62 mm Hg. Systemic examination was normal. On investigation random blood sugar, urea, creatinine, serum electrolytes, arterial blood gas analysis were normal. On further investigation urine osmolality was 85 mosm/L and serum osmolality of 292 mosm/L. Since urine osmolality was much lower than serum

Journal of Clinical Toxicology

Case Report Open Access

Chemical Pneumonitis Due to Accidental Ingestion of Liquid Mosquito Repellent Vaporizer: A Case Report

Uma Maheshwari R, Thandapani Kanimozhi* and Arulkumaran Arunagirinathan

Department of Paediatrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

*Corresponding author: Thandapani Kanimozhi, Assistant Professor, Department of Paediatrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India, Tel: +919952282500; E-mail: drkani88@gmail.com

Received date: February 06, 2019; **Accepted date:** April 05, 2019; **Published date:** April 12, 2019

Abstract

Mosquito repellents are widely used as varied forms in endemic areas infested with mosquitoes. Most vaporizers contain pyrethroid compounds. Children due to their exploratory nature and their mouthing stage are prone for ingestion and poisoning. Much of the reviewed literature perbaining to pyrethroids is related to neurological manifestations. Volatile solvents usually present in commercial formulations may also enhance pyrethroid toxicity. To the best of author's knowledge, liquid mosquito repellent vaporizer (LMRV) manifesting only as respiratory illness is uncommon, with this context, we report a two-year-old toddler with an accidental ingestion of LMRV leading to chemical pneumonitis.

Keywords: Child; Poisoning; Transfluthrin; Kerosene

Introduction

Liquid Mosquito Repellent Vaporizer (LMRV) is increasingly being used in areas endemic for vector borne diseases like malaria and dengue. Most vaporizers have transfluthrin and prallethrin, pyrethroids as repellents [1]. Suicidal or accidental ingestion is less commonly encountered of the few cases reported; most common manifestations have been related to toxicity to central nervous system [2]. We report a case of 2-year-old who presented with chemical pneumonitis following accidental ingestion of LMRV.

Case Report

A 2-year-old male child was brought to emergency department with history of accidental ingestion of mosquito repellent at home. According to mother, child had consumed around 10 ml, one hour before admission. Immediately child had 2 episodes of vomiting followed by breathing difficulty.

At admission, child had a Glasgow coma score 15/15, heart rate-102 BPM, respiratory rate-48/min, blood pressure-100/60 mm of Hg and oxygen saturation at room air was 100%. ECG monitored using multipara monitor was normal. On examination of respiratory system, child had sub costal and inter costal retractions. Fine crepitations were noted on auscultation over right site of chest. Rest of the systemic examination was normal.

Child was admitted in pediatric intensive care unit and started on supportive treatment with intra venous fluids; antiemetic's and proton pump inhibitors. Gastric lavage was not done as the liquid vaporizer contained deodorised kerosene 97.12%. X-ray chest done after 6 hours showed bilateral pneumonitis (Figure 1). Hemogram done following admission showed Hb of 9.7, TLC-15500 with polymorphic predominance and platelets was 4,10,000. Liver function and renal function tests were done which was within normal range. Child developed fever after admission. But considering chemical pneumonitis antibiotics were not started. Child improved over next 48 hours with supportive care alone and then discharged.

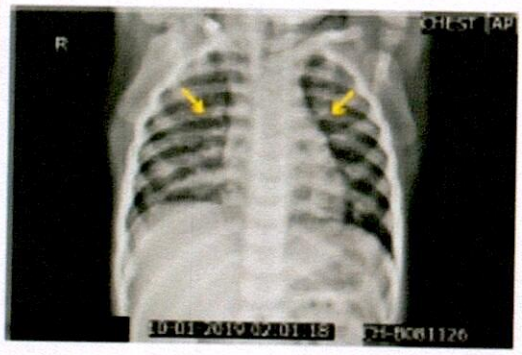


Figure 1: X-ray showing bilateral pneumonitis.

Discussion

Most LMR has pyrethroid derivatives as repellents and deodorised kerosene as vaporizer. Our patient had consumed a commercial brand with 1.6% transfluthrin.

Pyrethroids are established neurotoxicants with toxic effects on Na^+ and Cl^- channels. They delay the closure of Na^+ channels and surge of Na^+ influx leads to excitation. They also decrease Cl^- channel which is responsible for most neurotoxic effects of pyrethroids. At high concentrations, they act on GABA gated Cl^-channel causing seizures [2].

Immediately after ingestion, nausea, vomiting and abdominal pain may occur. CNS effects include dizziness, headache, fatigue, coma and

International Journal of Contemporary Pediatrics
Thirunavukkarasu BK et al. Int J Contemp Pediatr. 2019 May;6(3):966-971
http://www.ijpediatrics.com
pISSN 2349-3283 | eISSN 2349-3291
DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20190974

Original Research Article

Prevailing pattern of feeding practices and malnutrition among infant and young children

Bharath Kumar Thirunavukkarasu, Sujay Kumar Earan*

Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Received: 31 January2019
Accepted: 28 February 2019

***Correspondence:**
Dr. Sujay Kumar Earan,
E-mail: dr.sujay253@gmail.com

ABSTRACT

Background: Nutritional factors like breast feeding practices, weaning practices and diet during illness influence the growth and development of children. Recurrent infections are other important factors that lead to malnutrition.
Methods: This was a non-randomized prospective study using pretested, predesigned questionnaires. Study was done in a single centre to determine the pattern of feeding practices and malnutrition among infant and young children. This study was carried out in the Department of Paediatrics at Sri Manakula Vinayagar Medical College and hospital, Puducherry.
Results: Out of the 200 babies studied, 22% of the babies were exclusively breast fed and 5% of the babies were bottle fed. The remaining 73% of the babies were on both breasts feeding and bottle feeding. A 52% of children in the age group 6-12 months, 50% children under12-24 months and 52% of children >24 months were found to be malnourished according to WHO growth standards.
Conclusions: Quantity and quality of complementary feeds given is inadequate due to lake of awareness, fear and food stigmata. Hence feeding practices are far from satisfactory. Complementary feeding and weaning practice guidelines are better practiced as the age advances but their practice at a younger age would lead to a better outcome.

Keywords: Breast feeding, Complementary feeding, Infant, Malnutrition

INTRODUCTION

Optimum nutrition is essential for child survival and Quality of survival. The word nutrition is derived from nutricus which means "To suckle at the breast".[1] Nutrition is defined as "The process by which the organism utilizes food".

It signifies the dynamic process in which the food that was consumed utilized for nourishing the body.[2] "Malnutrition is found to start in the womb and ends in the tomb".[1] Severe forms of malnutrition like marasmus and Kwashiorkor represent only a tip of the iceberg.[2] Many more suffer from moderate, mild (or) invisible PEM malnutrition which increases morbidity and mortality.

Nutritional factors like breast feeding practices, weaning practices and diet during illness influence the growth and development of children. Recurrent infections are other important factors that lead to malnutrition.[3] The aim of the study was to assess the breast-feeding practices of children up to 6 months, to know the continued breast-feeding practices beyond 6 months, to evaluate the complementary feeding pattern in young children, to compare the same with IMNCI guidelines, to correlate the feeding practices and nutritional status in various age groups.

International Journal of Contemporary Pediatrics
Kumar BT et al. Int J Contemp Pediatr. 2019 Jul;6(4):1414-1420
http://www.ijpediatrics.com

pISSN 2349-3283 | eISSN 2349-3291

Original Research Article

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20192126

Iron deficiency anemia as a risk factor for simple febrile seizures in pediatric patients

Bharath Kumar T.[1], Kanimozhi Thandapani[1]*, Vinod Babu S.[2]

[1]Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India
[2]Department of Biochemistry, Mahatma Gandhi Medical college and Research Institute, SBV, Puducherry, India

Received: 04 April 2019
Accepted: 01 May 2019

***Correspondence:**
Dr. Kanimozhi Thandapani,
E-mail: drkani88@gmail.com

ABSTRACT

Background: Febrile seizure (FS) is the most common cause of seizure in children, occurring between 6-60 months. It coincides with peak age of incidence for Iron deficiency anemia (IDA). Iron is required for optimal growth and development and its deficiency is associated with numerous problems including persistent cognitive and motor delays. The objective was to study the role of IDA as a risk factor for simple febrile seizure and its recurrence.

Methods: A case control study was conducted among 90 febrile children - 45 cases with simple febrile seizure and 45 cases with febrile illness, between the age group of six months to five years of age at Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, between September 2013 and June 2015. The hematological parameters like Hemoglobin, Serum ferritin and RDW were compared between the two groups with respect to fever and different temperature intervals, recurrence of FS.

Results: Hb and Serum Ferritin levels were found to be significantly associated with simple febrile seizure, with p value of <0.002 and 0.001 respectively. Similar association was found at different temperature intervals. However, there was no association of hematological parameters with FS recurrence.

Conclusions: IDA is a significant risk factor for FS in children while same may not have any effect on the recurrence of FS.

Keywords: Iron deficiency anemia, Febrile seizures, S. Ferritin

INTRODUCTION

The International League Against Epilepsy has defined Febrile Seizure (FS) as a seizure occurring in childhood after one month of age, associated with a febrile illness not caused by an infection of the central nervous system, without previous neonatal seizures or a previous unprovoked seizure, and not meeting criteria for other acute symptomatic seizures.[1]

Febrile seizures are the most common type of seizure and occur in 3-4% of all children below 5 years of age.[2] Majority of FS are Simple 70-75% whereas 9-35 % FS are complex.3 Frequency of simple febrile seizure in India is 10-17%, which is higher than the developed countries like Japan (9-10%), Western Europe and USA (2-7%) and in Guam (14%).[4-10]

Febrile seizures are considered benign, but there is recent evidence that a small subset of children may have recurrent febrile seizure or develop epilepsy.[11] The risk of later epilepsy after a simple febrile seizure is 2-7.5% and the risk of developing epilepsy after complex febrile seizure is about 10-20%.[12] Recurrence of FS varies between 25-100% based on the number of risk factors involved.[13] Both recurrent FS and Epilepsy are apparent life threatening events and carry a burden on the child's

International Journal of Contemporary Pediatrics
Earan SK et al. Int J Contemp Pediatr. 2019 Mar;6(2):449-453
http://www.ijpediatrics.com

pISSN 2349-3283 | eISSN 2349-3291

DOI: http://dx.doi.org/10.18203/2349-3291.ijcp20190546

Original Research Article

How safe are our children in our own homes? accidental ingestion in children: a 6 year retrospective study from a tertiary care centre

Sujay Kumar Earan, Revathi Krishnakumar*, Sivaraman Sangili, Arulkumaran Arunagirinathan, Duvvur Preethika Reddy, Uma Maheshwari R.

Department of Pediatrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Received: 13 January 2019
Accepted: 11 February 2019

***Correspondence:**
Dr. Revathi Krishnakumar,
E-mail: revathikrishnakumar1990@gmail.com

ABSTRACT

Background: According to the World Health statistics, in 2016 more than 100000 deaths were caused due to unintentional poisonings. Children are vulnerable due to their smaller body surface area, an inherent behaviour of negation, curiosity in exploring their surroundings, their initial phallic stage where they tend to put any objects they come across into their mouth.

Methods: This study is a hospital based retrospective observational study where the records of all the children admitted due to poisoning, accidental or intentional from June 2012 to November 2018 were reviewed. All the children admitted due to food poisoning and idiosyncratic drug reactions were excluded from the study.

Results: A total of 203 cases of accidental ingestion were admitted during the study period, of which the majority of the patients were male children. The age group varied from 5 months to 14 years. Majority of the accidental ingestions were due to kerosene (108), followed by insecticides (25) and cleaning agents (20).

Conclusions: Poisoning in young children is unintentional and accidental, hence the introduction of safe child resistant containers should be encouraged in storing harmful chemicals. Knowledge about the chemicals, awareness about their hazardous effects and education of the care givers about safe storage would be the first step in the prevention of accidental ingestion. Establishment of a reporting system from all the health care centres and establishment of poison information system at all the levels is the need of the hour.

Keywords: Kerosene, Pediatric, Poisoning, Prevention

INTRODUCTION

Poison is defined by WHO as a substance that could cause harm to a living being, which could either be a result of bodily contact e.g., caustic, or due to absorption following ingestion, inhalation, or injection.[1] According to the World Health statistics, more than 100,000 deaths in 2016 were due to unintentional poisonings. In the same year, WHO data states that unintentional poisoning in children less than 5 years caused more than 23,000 deaths.[2,3] Children are especially vulnerable to hazardous household chemicals. Their smaller body surface area, inherent negation behaviour, curiosity to explore their surroundings, their initial phallic stage where they tend to put any objects they can find in their mouths, all these reasons require caregivers to be wary. Unsupervised and unattended children are most prone to the risk of accidental ingestion of toxic chemicals kept in the house. Acute poisoning from pesticides could often be fatal to children.

The aetiology of poisoning and the type of agents vary not only with geographical area, but also with time. As new chemicals and products are discovered every day, they are introduced into markets for a variety of purposes. The type and severity of poisoning also depend on

International Surgery Journal
Manoharan GV et al. Int Surg J. 2019 Feb;6(2):512-517
http://www.ijsurgery.com

pISSN 2349-3305 | eISSN 2349-2902

DOI: http://dx.doi.org/10.18203/2349-2902.isj20190394

Original Research Article

Evaluation of possum scoring system in patients undergoing laparotomy

Manoharan G. V.[1]*, Vijayalakshmi G.[2]

[1]Department of General Surgery, Sri Manakula Vinayagar Medical College, Puducherry, Tamil Nadu, India
[2]Department of General Surgery, ESIC Medical College and PGIMSR, KK Nagar, Chennai, Tamil Nadu, India

Received: 07 August 2018
Revised: 11 December 2018
Accepted: 29 December 2018

***Correspondence:**
Dr. Manoharan G.V.,
E-mail: gvmflm@yahoo.co.in

ABSTRACT

Background: Prediction of complications is an essential part of risk management in surgery. Knowing which patient is at risk of developing complications contributes to the quality of surgical care and cost reduction in surgery. Among the variety of scoring systems used to identify the "high risk" patient POSSUM scoring is the most widely used.
Methods: Patients undergoing laparotomy were selected serially and their physiological severity score on admission and operative severity scored at the end of 30days and compared with the POSSUM predicted score.
Results: In the elective surgery group, patients with morbidity correlated with high POSSUM scores but due to low overall morbidity conclusions could not be drawn while in the emergency group predicted morbidity correlated well with observed results. The low overall mortality in the study group precluded meaningful analysis.
Conclusions: POSSUM scoring system has an undeniable advantage in this set up for better patient counseling, improving the surgical outcomes in both emergency and elective wards and for better management of limited resources and manpower.

Keywords: Morbidity, Mortality, Outcome predictors, POSSUM, Scoring system

INTRODUCTION

This is an exciting time in medicine. The pace of risk management is an important health care issue. Prediction of complications is an essential part of risk management in surgery.[1] Knowing which patient is at risk of developing complications contributes to the quality of surgical care and cost reduction in surgery. It is therefore essential to identify and make appropriate decision on those patients who are at high risk of developing serious complications. Physiological and operative severity score for the enumeration of mortality and morbidity (POSSUM) has been used to produce numerical estimate of expected mortality and morbidity after variety of surgical procedures. POSSUM is a patient risk prediction model based on 12 patient characteristics and 6 characteristics of the surgery performed. It can be used in hospital setting to provide educational information. It integrates well in the existing hospital programs without causing any disruptions of hospital activities. When other scoring systems were compared with POSSUM, it was shown that POSSUM results were much more useful in predicting the outcome of surgery for patients. Various studies with POSSUM in various countries with different health systems and socio-economic status showed that there was no change in POSSUM ability to predict outcome of surgery. It was developed by Copeland GP et al, and has since been applied to several surgical groups including orthopedic patients, vascular surgery (AAA,, carotid endarterectomy etc.), head and neck surgery and GI/Colorectal surgery.[2-5] POSSUM is becoming more widely used in the UK as surgical culture moves more towards outcome measures and providing the patient with as much information as possible to make fully informed consent.[6] Furthermore, a system that uses risk adjusted prediction is going to become an essential tool for clinical

Innovations in Ophthalmology

Trash to treasure Retcam

Prithvi Chandrakanth, Ramya Ravichandran, Naveen G Nischal, M Subhashini

Digital fundus imaging is being used in diagnosis, documentation, and sharing of many retinal diseases and hence forms an essential part of ophthalmology. The use of smartphones for the same has been ever increasing. There is a need for simpler devices to couple the 20D lens and smartphone so as to take fundus photographs which can help in fundus documentation. This article describes a simple inexpensive technique of preparing a smartphone fundus photography device (Trash To Treasure (T3) Retcam) from the used materials in the clinics within minutes. This article will also review the optical principles of the T3 Retcam and describe the step–by–step method to record good-quality retinal image/videos. This inexpensive device is made by recycling and modifying the plastic hand sanitizer bottle in the clinics/hospitals which can be used for documenting, diagnosing, screening, and academic purposes.

Key words: Fundus camera, innovation, low cost device, smartphone fundus photography, telephthalmology

Access this article online
Website: www.ijo.in
DOI: 10.4103/ijo.IJO_1524_18
Quick Response Code:

Retinal imaging has been described since the late 19th century and ever since there has been a steady growth in the field of imaging the fundus of the eye.[1] It has become an essential part of ophthalmic practice and also is the standard method for documenting ocular findings. In a clinical setting this has been achieved by the fundus cameras: Mydriatic or nonmydriatic imaging systems which have helped clinicians to detect, diagnose, monitor, and share retinal images.[2] However, these instruments are not readily available in circumstances, such as in the emergency rooms, intensive care units, or when the patient is immobile as most of these systems are bulky and stationary and hence the availability and high cost limit their routine use in ophthalmology. Portable cameras introduced for fundus imaging are often costly and must be connected to computers for processing and visualization and also for storage.

The ubiquitous smartphones have become an inexpensive alternative for fundus imaging when coupled with a condensing 20D lens. Smartphones equipped with high-resolution cameras are being used to take the anterior segment and fundus pictures.[3-6] Smartphones have the potential to capture high-quality fundus photos as it incorporates an optical and illumination system in the form of a condensing lens and a source of light such as the light emitting diode (LED) flash which is coaxial.[7] When this optical system is then coupled with the 20D condensing lens it resembles an indirect ophthalmoscopy optical system which allows us to record digital fundus images.[8] To increase the ease and stability of taking a fundus photograph, we need to keep the smartphone and the condensing lens in alignment with a structural device. This structural support can be given by modifying the readily available used materials from the clinic which would otherwise be thrown into the waste bin. Here, we describe the method to create such a device within a few minutes and how to use it efficiently [Table 1 and Fig. 1].

Methods

Preparing the T3 Retcam

A used hand sanitizer bottle of 15–20 cm was taken. The 20 D lens was kept at the base of the bottle and an outer circular outline was marked. An inner circular outline was drawn such that it was 0.6 cm less than the diameter of the outer outline. The circles drawn were then divided into four quadrants (a, b, c, d). The outer circular outline area of panels a and c and the inner circular outline area of panels b and d was cut continuously which gave rise to flap like structures at area b and d. The flaps were folded inwards and the 20D lens was inserted into the circular hole made at the base of the bottle in a rotational manner. The next step was to attach the smartphone to the top of the bottle and align it. For this, an old phone case was taken with the smartphone in it and was aligned in a way that the 20D lens borders fit exactly into the screen of the smartphone in the camera mode. Once it was aligned the case was adhered on the bottle top using an instant adhesive such as superglue (cyanoacrylate)/Fevikwik (Pidilite). The smartphone can also be alternatively placed on the bottle top using any of the several universal smartphone adapters in the market making the T3 Retcam universal to any smartphone. A black

Department of Ophthalmology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Correspondence to: Dr. Prithvi Chandrakanth, Chandradevi, Opp Super Petrol Pump, Behind QRS, Kannur Road, W. Naddakavu, Kozhikode - 673 011, Kerala, India. E-mail: dr.prithvi.chandrakanth@gmail.com

Manuscript received: 09.09.18; Revision accepted: 29.12.18

Cite this article as: Chandrakanth P, Ravichandran R, Nischal NG, Subhashini M. Trash to treasure Retcam. Indian J Ophthalmol 2019;67:541-4.

Innovation

Anterior segment photography with intraocular lens

Prithvi Chandrakanth, P Nallamuthu

Key words: Anterior segment photography, innovation, intraocular lens, low-cost, smartphone photography

Smartphone photography has become essential in Ophthalmic practice and a standard way of recording ocular findings for documentation, expert opinion, academics, tele-ophthalmology and patient education.[1,2] Anterior segment photography has been made possible using adapters which help fix the smartphone to the slit lamp or adapters with lens which can be fixed to the phone camera that are commercially available.[3-5] This article describes a novel technique of taking Anterior Segment Photography with Intraocular lens (ASPI) [Figs. 1 and 2].

Preparing the ASPI

- 2 strips of 4 cm × 2 cm hard chart paper/plastic sheet were cut
- A circular opening of 5 mm diameter was made on both the strips at one end using a No. 11 surgical blade
- The intraocular lens was placed on the opening of one strip by applying liquid adhesive over the haptics of the IOL (alternatively, double-sided tape can also be used to fix the IOL and the second strip in place)
- The second strip was then stuck on top of the IOL and the first strip so as to cover it
- This arrangement was then aligned on the smartphone camera with a Micropore/Cellotape
- The smartphone was then moved towards the patient to focus on the lesion and a still photograph or a video was recorded with the inbuilt flash or an external light source (torch)
- The images obtained were of high quality with high magnification and moreover, it is a device that can be made using materials available in the clinic/hospital [Figs. 3 and 4].

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_52_19

Department of Ophthalmology, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Puducherry, India

Correspondence to: Dr. Prithvi Chandrakanth, Chandradevi, Behind 'QBS', Kannur Road, W. Naddakavu, Kozhikode - 673 011, Kerala, India. E-mail: dr.prithvi.chandrakanth@gmail.com

Manuscript received: 07.01.19; Revision accepted: 13.05.19

Smartphones are beginning to play a major role as a medical diagnostic tool. They are simple, stable, affordable as well as being portable, with high storage capacity and wireless connectivity makes the ASPI an important tool for diagnosis and documentation in various setups such as clinics, hospitals, health centers, and camps.

Acknowledgements

Department of Ophthalmology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry.

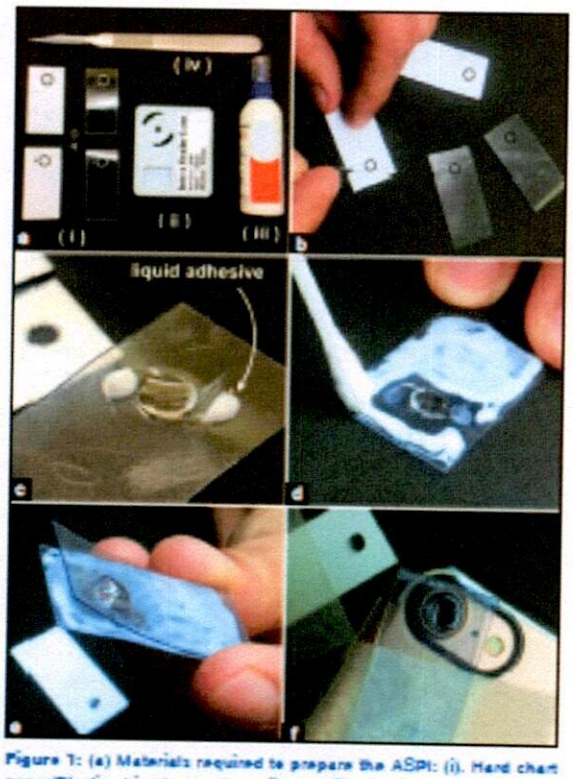
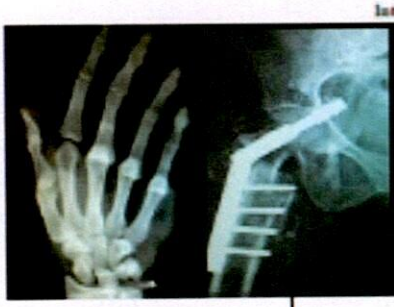


Figure 1: (a) Materials required to prepare the ASPI: (i). Hard chart paper/Plastic strip: 4 cm × 2 cm (ii). IOL (iii). Liquid adhesive (iv). No. 11 Surgical blade (b) Making the 5 mm circular hole on the strip using the no. 11 surgical blade. (c) Fixing the IOL on the circular hole by applying liquid adhesive on the haptics. (d) and (e) Fixing the second strip on the first strip and IOL using adhesive. (f) Placing the ASPI on the Smartphone camera

Cite this article as: Chandrakanth P, Nallamuthu P. Anterior segment photography with intraocular lens. Indian J Ophthalmol 2019;67:1690-1.



International Journal of Orthopaedics Sciences

E-ISSN: 2395-1958
P-ISSN: 2706-6630
IJOS 2020; 6(1): 1255-1258
© 2020 IJOS
www.orthopaper.com
Received: 08-11-2019
Accepted: 12-12-2019

Dr. Kalyan Deepak Sreenivas
Assistant Professor, Department of Orthopedics, SMVMCH, Pondicherry, India

Dr. Justin Moses C
Associate Professor, Department of Orthopedics, SMVMCH, Pondicherry, India

Dr. Khisan Kumar PN
Resident, Department of Orthopedics, SMVMCH, Pondicherry, India

Corresponding Author:
Dr. Justin Moses C
Associate Professor, Department of Orthopedics, SMVMCH, Pondicherry, India

Functional outcome of distal tibial fractures treated by stainless steel locking plates with minimally invasive plate Osteosynthesis in rural population: A prospective study

Dr. Kalyan Deepak Sreenivas, Dr. Justin Moses C and Dr. Khisan Kumar PN

DOI: https://doi.org/10.22271/ortho.2020.v6.i1q.1990

Abstract
Introduction: Open reduction and plating of distal tibial fractures require extensive soft tissue dissection and periosteal stripping. Complications like infection, delayed union and non-union are common. Minimally invasive plate Osteosynthesis (MIPO) technique preserves soft tissue envelope, vascularity of fracture fragments and containment of fracture haematoma and provide biologically favourable environment for fracture healing.
Materials and methods: 20 patients of distal tibial fractures treated with locking plate by MIPO technique between October 2015 and January 2017 were included in this prospective study. Analysed using software SPSS version 24.0
Results: Mean average time to union is 15.2 weeks. Based on Tenny and Wiss scoring criteria, eighteen patients (90%) had good and excellent results at 22 weeks with fracture union.
Conclusion: MIPO technique provides good healing and decreases the incidence of non-union and the need for bone grafting. This technique can be used in distal tibia fractures where nailing cannot be done, such as, fractures with small distal metaphyseal fragments, coronal fractures, Comminuted and intra-articular fractures.

Keywords: stainless steel locking plates, minimally invasive plate Osteosynthesis

1. Introduction

The distal part of the tibia is superficial with less soft tissue coverage. Injuries to this region cause more morbidity due to compromised blood supply, soft tissue damage and involvement of the articular surface. With the increase in high velocity trauma resulting in more complex fracture patterns, the management of distal tibial fractures has become more challenging. Fracture pattern, soft tissue injury and bone quality influence the selection of fixation technique [1]. External fixators can lead to inadequate reduction, malunion, non-union and pin tract infection [2]. Intramedullary nailing is not feasible because of short metaphyseal segment possibility of rotational and secondary malalignment [3]. Open reduction and plating needs extensive soft tissue dissection and periosteal stripping. Incidence of infection, delayed-union, and non-union is higher [4]. Minimally invasive plate Osteosynthesis (MIPO) technique offers biologic fixation with preservation of soft tissue, fracture haematoma and bone vascularity [5]. Threaded heads of locking screws lock into the threads of the locking plate creating a fixed angle construct which is less prone to loosening. Anatomically contoured locking plate prevents malreduction and allows a better distribution of angular and axial load. Locking plate indirectly reduces and bridges the fracture without producing compressive forces on the bone [6]. They have locking screw holes to fit cortical locking screws in the proximal and cancellous locking screws in the distal part of the plate to allow fixation of cortical and cancellous parts of tibia respectively. Separate plates are available for placement in the medial or lateral, left or right sides of the distal tibia in various shapes and sizes. The number of distal cancellous screw holes may vary with different manufacturers. The cortical screw holes are vertically oriented and the cancellous screw holes are horizontally oriented to increase the number of screw purchases [7].

pISSN: 2454-7107, eISSN: 2455-4189

Indian Journal of Law and Human Behavior
Volume 5 Number 2, May - August 2019
DOI: http://dx.doi.org/10.21088/ijlhb.2454.7107.5219.2

Original Article

Thyroid Dysfunction Among Patients with Depression in a Tertiary Care Hospital in Puducherry

S Sajeesh[1], S Arun[2], K Vinoth Krishnadass[3], R Kumar[4]

Author Affiliation

[1]Consultant Psychiatrist, Holy Family Hospital, Muthalakodam, Thodupuzha, Idukki district, Kerala 685605, India. [2]Associate Professor, [3]Professor & Head, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry 605107, India.

Corresponding Author

Arun Selvaraj, Associate Professor, Department of Psychiatry, Sri Manakula Vinayagar Medical College and Hospital, (SMVMCH), Puducherry 605107, India.

E-mail: skkap@yahoo.co.in

Received on 11.04.2019

Accepted on 04.05.2019

Abstract

Background: The association between depression and thyroid disorders are studied extensively but still remains disputable. Hence, the current study was designed to estimate the proportion of thyroid dysfunction among depressive patients and also to study their association. *Material and Methods:* This was a hospital based cross sectional study done in a tertiary care centre in rural Puducherry. Eighty eligible patients with depression of any severity were included. They were interviewed with structured pretested questionnaire. The Hamilton Depression Rating Scale was used to measure the level of severity of depression. Thyroid functions test was carried out. Ethical principles were adhered throughout the study. SPSS version 24.0 was used for analysis and Chi-square test was used to find out association between severity of depression and thyroid status. *Results:* Of 80 depressed participants 45% were more than 45 years, females (72.5%) were the maximum and so 35% were homemakers. Participants belonging to upper middle socio-economic class were the majority (42.5%) and 65% were from rural area. Of the study participants 60, (75%) had normal thyroid function tests, one (5%) had hyperthyroid state and the remaining 19 (95%) had hypothyroidism. Among the depressed patients 67.5% had mild to moderate depression and 32.5% had severe depression. Increasing age and hypothyroid status were statistically associated. *Conclusions:* Majority of the depressed patients had moderate level of severity and hypothyroidism was the most common thyroid abnormality identified. Increasing age and hypothyroid status were associated with depression. Periodic screening of depressed patients for thyroid abnormality is recommended.

Keywords: Association; Depression; Hypothyroid; Screening.

How to cite this article:

S Sajeesh, S Arun, K Vinoth Krishnadass *et al.* Thyroid Dysfunction Among Patients with Depression in a Tertiary Care Hospital in Puducherry. Indian J Law Hum Behav. 2019;5(2):103-109.

Introduction

Depression is one of the most common mental illnesses causing significant impairment in standard of life globally. It is considered as the second leading cause of Disability Adjusted Life Years (DALYS) and has been ranked fourth of all dreadful health problems in the world by World Health Organization [1]. By 2020, it is expected to be the second largest killer after heart disease in all countries including India [2].

The etiology of depression is most frequently studied, but it is never ideally understood. There are various factors which predispose people to develop a depressive disorder. Many major/chronic medical illnesses also make individuals vulnerable

JMSCR Vol||06||Issue||01||Page 31993-31998||January 2018

www.jmscr.igmpublication.org
Impact Factor 5.84
Index Copernicus Value: 71.58
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v6i1.96

Journal Of Medical Science And Clinical Research

Sexual Dysfunction among Men with Alcohol Dependence Syndrome in a Tertiary Care Hospital, Puducherry

Authors

John Dinesh A[1], Sudha V[2], Alok Pandey[3]

[1]Associate Professor, Department of Psychiatry, Sri Venkateshwaraa Medical College Hospital & Research Centre, Ariyur, Puducherry, India

[2]Assistant Professor, Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Kudapakkam, Puducherry, India

[3]Professor, Department of Psychiatry, Sri Venkateshwaraa Medical College Hospital & Research Centre, Ariyur, Puducherry, India

Corresponding Author

Sudha V

Assistant Professor, Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Kudapakkam, Puducherry, India

Abstract

Background: *Alcohol is a depressant and using it regularly can dampen mood and cause sexual dysfunction on the longer run .Many alcoholics often suffer from severe sexual problems as the result of their drinking. The objective of the study is to find out the prevalence and types of sexual dysfunctions among alcohol dependent patients.*

Materials and Methods: *A hospital based cross sectional study conducted in Puducherry during December 2016 to November 2017 among 81males patients aged between 21 -50 years attending Psychiatry OPI with alcohol related problems using Sexual Dysfunction Checklist, framed by using Arizona Sexual Experience Questionnaire(ASEX) and the Diagnostic Criteria for Research (ICD- 10) for sexual dysfunction.*

Results: *The mean age of the study participants is 33.3+6.66 years. About 40 percent of study population were between the age group of 30 and 40 years. Total Duration of alcohol dependence was 7.47+5.607 years. The prevalence of sexual dysfunction was found to be 67.90% among study population .The Erectile dysfunction and inability to have orgasm was found to be the most common sexual dysfunction among the alcohol dependent patients followed by arousal problem and low sexual desire.*

Conclusion: *Sexual dysfunction is highly prevalent in patients with alcohol dependence. Chronic alcohol use, severity of dependence, co-morbid substance dependence are all significant predictors of developing sexual dysfunctions. All patients with alcohol use should be routinely evaluated for sexual dysfunctions.*

Keywords: *Alcohol, Sexual Dysfunction, Alcohol Dependence.*

Introduction

According to the world health report (2002) 8.9% of the total burden of the disease worldwide in 2000 was from the use of psychoactive substances.[1] It is reported that 32% of men and 11% of women over the age of 15 consume

Monaldi Archives for Chest Disease 2019; volume 89:1039

Identification of subclinical cognitive impairment in chronic obstructive pulmonary disease using auditory P300 event related potential

Soundariya Krishnamurthy[1], Yuvarajan Sivagnanamc[2], Gokul Chandu Gumallapu[3]

[1]Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry; [2]Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry; [3]Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Adequate cognitive functioning in chronic obstructive pulmonary disease (COPD) patients is essential to understand the nature of the disease, adherence to treatment, and for leading a better quality of life. While cognitive impairment in severe forms of COPD have been well documented, identification of subclinical cognitive impairment in stable COPD patients remains crucial for planning prevention strategies. Hence the present study aimed to study and compare the cognitive function between the COPD patients, and normal individuals. The cognitive function was assessed in 42 stable COPD patients and 42 normal individuals with Mini Mental State Examination (MMSE), and auditory P300 event related potentials. Baseline characteristics and the cognitive parameters were compared between the COPD patients and the normal individuals; a $p<0.05$ was considered statistically significant. The latency of the P300 waves was significantly ($p<0.05$) prolonged (304.27±20.73 in COPD, 291.11±24.53 in normal individuals), and the amplitude (4.36±1.56 in COPD, 5.46±3.12 in normal individuals) was significantly reduced in the COPD patients compared to the normal individuals. MMSE scores were also significantly ($p<0.001$) different between the COPD patients (26.97±0.89), and the normal individuals (27.80±0.83). Cognition may be affected even at the earlier stages of the disease among the COPD patients, as evident by changes in the P300 values. Auditory P300 event related potential may be used as an adjunct to the routine MMSE examination, as it serves as an effective tool in identifying the cognitive impairment in different stages of COPD. This may help the patients to adopt prevention strategies that help to avoid adverse effects on cognition in future.

Correspondence: Yuvarajan Sivagnanamc, Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet Puducherry 605107, India.
Mobile: +91.9789156785.
E-mail: navagnanamc@yahoo.com

Contributions: All authors contributed equally.

Conflict of interest: The authors declare no potential conflict of interest.

Key words: Cognition; COPD; MMSE; P300.

Received for publication: 23 January 2019.
Accepted for publication: 10 May 2019.

Monaldi Archives for Chest Disease 2019; 89: 1039
doi: 10.4081/monaldi.2019.1039

Introduction

Chronic obstructive pulmonary disease (COPD) may be considered as a complex disorder associated with several systemic consequences, and comorbidities [1]. Understanding and identification of the comorbidities in COPD may help to recognize the pattern of the disease, and in planning interventional strategies. Adequate cognitive functioning in patients is essential to understand the nature of the disease, adherence to treatment, and for leading a better quality of life. Cognitive dysfunction may also be associated with increased morbidity and mortality. There has been increased recognition of cognitive impairment in patients with severe COPD in the past few years [2,3]. Hypoxemia, systemic inflammation, associated comorbidities like smoking, and several other factors have been linked with cognitive dysfunction in COPD [4].

Literature search on cognitive functioning in COPD patients revealed conflicting results. While some studies identified cognitive impairment in end stages of COPD [5], and during acute exacerbations [6], few studies identified mild cognitive impairment even in non-hypoxemic stable COPD patients [7]. Hence degree of cognitive dysfunction in different stages of COPD need to be explored. Prior studies that studied cognitive function in COPD patients relied on MMSE mini-mental state examination (MMSE), and other battery of tests, which are well known to be influenced by several confounding factors [8,9].

Event related potentials are the voltage changes induced within the brain in response to a variety of sensory, motor and cognitive processes. P300 is a long latency endogenous cortically generated positive wave form of auditory event related potential, with maximum peak around 300 milliseconds post stimulus [10,11]. It is widely recognized as a valid tool in assessing the cognitive function. The changes in P300 amplitude reflect the nature of information processing and P300 latency is related with cognition ability, and attention. Unlike other psychometric tests, event related potentials are not influenced by personality traits, or education-

Malignant bronchial ulcer with coexistent pulmonary tuberculosis

Yuvarajan Sivagnaname, Praveen Radhakrishnan, Antonius Maria Selvam

Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Abstract

Ulceration in the bronchial mucosa is noted rarely in bronchoscopy. In the past, it was frequently encountered in endobronchial tuberculosis. Deep necrotic bronchial ulcers are seen very rarely in clinical practice. Here we are reporting a first-ever case report of malignant bronchial ulcer presenting as necrotic deep bronchial ulcer, in a 70-year-old male, chronic smoker, who complained of breathlessness for 3 months, cough for 3 months, loss of weight and of appetite for 1 month. Bronchoscopy showed a large necrotic ulcer with dense anthracotic pigmentation which bleeds in touch with forceps. Bronchial washings, brushings, endobronchial biopsy were taken from the ulcer which was suggestive of poorly differentiated bronchogenic carcinoma. TBNA from the mediastinal nodes showed the features of caseous necrosis with granulomatous inflammation. Consequently, with the diagnosis of poorly differentiated carcinoma with pulmonary tuberculosis and COPD, the patient was started on anti-tuberculosis drugs, inhaled bronchodilators and referred to an oncologist for chemotherapy.

Introduction

Ulcerations in the bronchial mucosa are not common in bronchoscopy, unlike in endobronchial tuberculosis, besides ulcers in those conditions are usually superficial. Similar superficial ulcerations of bronchial mucosa were noted in patients with adult varicella pneumonia, which presents with deep bronchial ulcers and is associated with poor prognosis [1]; deep ulcers were also noted in patients with Wegener's granulomatosis [2] (Table 1). Here, we are reporting a first-ever rare case report in literature of bronchogenic carcinoma presenting with a deep necrotic bronchial ulcer on bronchoscopy.

Correspondence: Yuvarajan Sivagnaname, Department of Respiratory Medicine, Sri Manakula Vinayagar Medical College and Hospital, Room no. 99, Kalitheerthalkuppam, Madagadipet, Puducherry 605107, India.
Mobile: +91.9789156785.
E-mail: ssivagnaname@yahoo.com

Key words: Malignant bronchial ulcer; pulmonary TB; bronchogenic carcinoma.

Received for publication: 20 January 2019.
Accepted for publication: 20 November 2019.

Monaldi Archives for Chest Disease 2019; 89:1037
doi: 10.4081/monaldi.2019.1037

Case Report

A 70-year-old male, chronic smoker with a history of 30 pack/years, came to our hospital with main complaints of breathlessness for 3 months, cough for 3 months, loss of weight and appetite for 1 month. Initially, he was evaluated by a general practitioner, with chest radiograph and basic blood investigations.

The patient was admitted in our hospital and investigated further. Chest radiograph showed diffuse heterogenous opacity involving bilateral lung fields with blunting of costophrenic angles and flattened diaphragm. Blood investigations were within normal limits except for leukocytosis with polymorph predominance. Sputum direct smear for acid fast bacilli was negative. Sputum gram stain showed gram positive cocci in chains.

Computed tomography of chest was done which showed nodular lesions in right upper lobe with fibrotic strands in the apex along with randomly distributed nodules with few mediastinal necrotic lymph nodes. Peribronchial thickening at the level of bronchus intermedius was also noted.

Then, a diagnostic bronchoscopy was performed, which showed large necrotic ulcer with dense anthracotic pigmentation and unhealthy bronchial mucosa at the right secondary carina which bleeds on touch with forceps. Bronchial washings, brushings, endobronchial biopsy were taken from the ulcer. Bronchial wash/brush cytology showed highly cellular smear composed of many reactive bronchial epithelial cells and atypical cells. The atypical cells are round to oval arranged in cohesive clusters and sheets with overlapping nuclei, attempted rosettoid with glandular pattern and scattered single cells suggestive of poorly differentiated bronchogenic carcinoma. Conventional Transbronchial needle aspiration (TBNA) from the mediastinal nodes in subcarinal station showed the features of caseous necrosis with granulomatous inflammation and the cartridge based nucleic acid amplification test (CBNAAT) was positive for *Mycobacterium Tuberculosis*. Hence, with the diagnosis of poorly differentiated carcinoma with pulmonary tuberculosis, the patient was started on anti-tuberculosis drugs on a daily regimen (rifampicin 450 mg, isoniazid 300 mg, pyrazinamide 1500 mg, ethambutol 1200 mg) and referred to an oncologist for chemotherapy.

Discussion

The coexistence of pulmonary TB and bronchogenic carcinoma was first reported by Bayle in 1810 [3]. The simultaneous develop-

Dr. KAGNE. R.N
DEAN
SRI MANAKULA VINAYAGAR
MEDICAL COLLEGE & HOSPITAL
KALITHEERTHALKUPPAM,
PUDUCHERRY-605107.

November - December, 2019/ Vol 5/ Issue 5 Print ISSN: 2581-4389, Online ISSN: 2455-5444

Original Research Article

Study of syndromic management of sexually transmitted infections in women of reproductive age at a tertiary care hospital in Tamil Nadu, India

Durga. K.[1], Yuvarajan S.[2], Yasodha S.[3], Karthika K.[4]

[1]Dr. Durga K., Associate Professor, Department of Obstetrics and Gynaecology, SLIMS, Puducherry, [2]Dr. Yuvarajan Sivagnaname, Professor, Department of Pulmonary Medicine, SMVMCH, Puducherry, India, [3]Dr. S. Yasodha, Associate Professor, Department of Obstetrics and Gynaecology, SLIMS, Puducherry, [4]Dr. K. Karthika, Assistant Professor, Department of Obstetrics and Gynaecology, KGH, Tamil Nadu, India

Corresponding Author: Dr. Durga K, Associate Professor, Department of Obstetrics and Gynaecology, SLIMS, Puducherry, India. E-mail: drdurgakrish@gmail.com

Abstract

Background: Sexually transmitted infections (STI) rank among the top five conditions for which sexually active adults seek health care in the developing countries. The disease prevalence is about 6% in India. Syndromic management remains the core intervention in the WHO strategy in resource poor setting were laboratory services are not available. This study was done to determine the effectiveness of syndromic management of STIs in women of reproductive age [15-49 years] attending gynaec outpatient block at Institute of Obstetrics and Gynaecology (IOG), Chennai. **Methods:** It is a prospective analytical study where 500 women of reproductive age symptomatic for STI were studied. A well-structured proforma was prepared for selection of women, history and examination. Based on the findings they were classified into STI syndromes and color-coded kits were given accordingly. Follow-up of patients was done to assess the effectiveness of treatment. **Results:** Overall there was 84.8% good response to Syndromic management. The follow up rate was 85.6%. Vaginal discharge syndrome was the commonest syndrome followed by lower abdomen pain syndrome. **Conclusion:** STIs cause major health problem and it is important to diagnose and treat them at the earliest. Syndromic management is definitely an effective tool to manage STIs particularly in low resource settings.

Keywords: Sexually transmitted infections, Syndromic management, Bacterial vaginosis

Introduction

Sexually transmitted infections (STI) are prevalent worldwide. Presence of a STI/RTI (Reproductive tract infections) in the sexual partner increases the risk of acquisition of HIV from an infected partner by 8-10-fold. Effective control of STI/RTI is a strong and most cost-effective strategy for reducing the transmission of HIV. In 1991, Syndromic management approach was developed by World Health Organization (WHO) to address the limitation of etiological and presumptive diagnosis of STI. The syndromic management is an approach wherein the health care providers diagnose and treat patients on the basis of certain groups of symptoms and signs rather than those for specific STI.

The Need for Syndromic Management

Due to non-availability of skilled and experienced persons at health centres to identify the infections and because of the expensive nature of sophisticated equipment's, which is not available everywhere, it is likely to miss infections. Missed infections are left untreated. Because of the time-consuming nature of the diagnostics tests there is a delay in starting treatment. In addition, there is only 50% chance of diagnosing infections. Lack of diagnosing the STI and initiating treatment for STI at the prompt time will lead to continuous transmission of infections. Complications will follow and the sequele of STI will remain forever. All these factors lead to the evolution of Syndromic management.

Manuscript received: 16th December 2019
Reviewed: 23rd December 2019
Author Corrected: 28th December 2019
Accepted for Publication: 30th December 2019

November - December, 2019/ Vol 5/ Issue 5 Print ISSN: 2581-4389, Online ISSN: 2455-5444

Original Research Article

Study of syndromic management of sexually transmitted infections in women of reproductive age at a tertiary care hospital in Tamil Nadu, India

Durga. K.[1], Yuvarajan S.[2], Yasodha S.[3], Karthika K.[4]

[1]Dr. Durga K., Associate Professor, Department of Obstetrics and Gynaecology, SLIMS, Puducherry, [2]Dr. Yuvarajan Sivagnaname, Professor, Department of Pulmonary Medicine, SMVMCH, Puducherry, India, [3]Dr. S. Yasodha, Associate Professor, Department of Obstetrics and Gynaecology, SLIMS, Puducherry, [4]Dr. K. Karthika, Assistant Professor, Department of Obstetrics and Gynaecology, KGH, Tamil Nadu, India

Corresponding Author: Dr. Durga K, Associate Professor, Department of Obstetrics and Gynaecology, SLIMS, Puducherry, India. E-mail: drdurgakrish@gmail.com

Abstract

Background: Sexually transmitted infections (STI) rank among the top five conditions for which sexually active adults seek health care in the developing countries. The disease prevalence is about 6% in India. Syndromic management remains the core intervention in the WHO strategy in resource poor setting were laboratory services are not available. This study was done to determine the effectiveness of syndromic management of STIs in women of reproductive age [15-49 years] attending gynaec outpatient block at Institute of Obstetrics and Gynaecology (IOG), Chennai. **Methods:** It is a prospective analytical study where 500 women of reproductive age symptomatic for STI were studied. A well-structured proforma was prepared for selection of women, history and examination. Based on the findings they were classified into STI syndromes and color-coded kits were given accordingly. Follow-up of patients was done to assess the effectiveness of treatment. **Results:** Overall there was 84.8% good response to Syndromic management. The follow up rate was 85.6%. Vaginal discharge syndrome was the commonest syndrome followed by lower abdomen pain syndrome. **Conclusion:** STIs cause major health problem and it is important to diagnose and treat them at the earliest. Syndromic management is definitely an effective tool to manage STIs particularly in low resource settings.

Keywords: Sexually transmitted infections, Syndromic management, Bacterial vaginosis

Introduction

Sexually transmitted infections (STI) are prevalent worldwide. Presence of a STI/RTI (Reproductive tract infections) in the sexual partner increases the risk of acquisition of HIV from an infected partner by 8-10-fold. Effective control of STI/RTI is a strong and most cost-effective strategy for reducing the transmission of HIV. In 1991, Syndromic management approach was developed by World Health Organization (WHO) to address the limitation of etiological and presumptive diagnosis of STI. The syndromic management is an approach wherein the health care providers diagnose and treat patients on the basis of certain groups of symptoms and signs rather than those for specific STI.

The Need for Syndromic Management

Due to non-availability of skilled and experienced persons at health centres to identify the infections and because of the expensive nature of sophisticated equipment's, which is not available everywhere, it is likely to miss infections. Missed infections are left untreated. Because of the time-consuming nature of the diagnostics tests there is a delay in starting treatment. In addition, there is only 50% chance of diagnosing infections. Lack of diagnosing the STI and initiating treatment for STI at the prompt time will lead to continuous transmission of infections. Complications will follow and the sequele of STI will remain forever. All these factors lead to the evolution of Syndromic management.

Manuscript received: 10th December 2019
Reviewed: 20th December 2019
Author Corrected: 28th December 2019
Accepted for Publication: 30th December 2019

Original Research Article DOI: 10.18231/2394-2754.2019.0020

Clinical profile of pregnant women with community acquired pneumonia attending tertiary care hospital

Durga K[1], S. Yuvarajan[2,*]

[1]Assistant Professor, [2]Associate Professor, [1]Dept. of Obstetrics and Gynaecology, [2]Dept. of Respiratory Medicine, [3]Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry, [2]Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

***Corresponding Author: S. Yuvarajan**
Email: nsivagnaname@yahoo.com

Received: 16th January, 2019 **Accepted:** 11th February, 2019

Abstract

Introduction: Community acquired pneumonia (CAP) is recognized as a common problem that carries a substantial morbidity and mortality in preantibiotic era. With the advent of newer diagnositics and advanced antimicrobials there is reduction in morbidity and mortality, but in era of MDR pathogens its often difficult and challenging to manage CAP. However, pneumonia in younger individuals can be severe and fatal. Pneumonia in the pregnant patient is the most frequent cause of life threatening non-obstetric infection.

Aims and Objective: The aim of this study was to assess the pattern of community acquired pneumonia among pregnant women in tertiary care hospital.

Materials and Method: 32 pregnant ladies presented with signs, symptoms & radiological findings consistent with community acquired pneumonia were selected from out patient's clinics of obstetrics and gynecology department.

Results: The present study included 32 pregnant ladies with community acquired pneumonia, who were selected from out patient's clinics of obstetrics and gynecology department. Their ages ranged from 20-40 years old with mean age of 25.32 years old (±4.20 SD). Cough (90%) was the most common symptom followed by fever (70%) among the patients. Chest x ray done with abdominal shield showed pulmonary infiltrates in (65%). The most common radiological findings are consolidation (75%) nodular infiltrates (20%), cavity (3%), pleural effusion (2%). The most common organisms isolated were streptococcus pneumonia, hemophilus influenza, staphylococcus aureus mycobacterium tuberculosis.

Conclusion: Morbidity and mortality in pregnant patients with pneumonia continue to pose a significant challenge. Early recognition of the diseases process and appropriate antibiotic treatment are required to ascertain an optimal outcome. The treatments in the gravid patients generally follow standard guide lines for the treatment of pneumonia in adults. Concern for fetal outcome should not delay any treatment strategies as improvement in maternal oxygenation and status is the best way to ensure fetal protection.

Keywords: Pneumonia, Pregnancy.

Introduction

Community acquired pneumonia (CAP) is recognized as a common problem that carries a substantial morbidity and mortality in preantibiotic era. With the advent newer diagnositics and advanced antimicrobials there is reduction in morbidity and mortality but in era of MDR pathogens its often difficult and challenging to manage CAP. CAP usually affects people at the extremes of age and while the occurrence of CAP in young adults is uncommon.[1] However, pneumonia in younger individuals can be severe and fatal. Pneumonia in the pregnant patient is the most frequent cause of fatal non-obstetric infection.

Considering the potential teratogenicity of radiography and drugs, both patients and their physicians tend to postpone radiation examinations and medical treatment when pneumonia is suspected. As a result, delayed diagnoses and referral are common in patients with pneumonia complicating pregnancy.[2,3] Several physiological and immunological changes that are experienced during pregnancy, such as altered T lymphocyte immunity, increased oxygen consumption, decreased functional residual capacity, decreased chest compliance, and increased risk of aspiration, may predispose pregnant women to a more severe course of pneumonia, which may result in greater maternal and fetal morbidity and mortality.[4]

Alterations in cellular immunity have been widely reported and are aimed primarily at protecting the fetus from the mother. These changes include decreased lymphocyte proliferative response, especially in the second and third trimesters, decreased natural killer cell activity, changes in T cell populations with a decrease in numbers of circulating helper T cells, reduced lymphocyte cytotoxic activity, and production by the trophoblast of substances that could block maternal recognition of fetal major histocompatibility antigens.[5]

Often there are difficulties in diagnosis of CAP during pregnancy reflect the complexity of differentiating between symptoms related to physiological changes and more sinister symptoms of disease. Patients themselves may attribute symptoms of pneumonia to pregnancy and hence usually present late to the clinicians. Chest discomfort may also occur in the later stages of pregnancy, possibly due to the mechanical effects of the uterus on the diaphragm. It may be difficult to distinguish it from other causes of chest discomfort.[6]

Original Research Article http://doi.org/10.18231/j.ijirm.2019.025

Study on the utility of serum uric acid to creatinine ratio in the management of patients with chronic obstructive pulmonary disease (COPD)

Dithan P.Y[1], Yuvarajan S[2*], Praveen. R[3], Antonious Maria Selvam[4]

[1,2,4]Assistant Professor, [3]Associate Professor, [1]Dept. of Pulmonary Medicine, [2-4]Dept. of Respiratory Medicine, [1]Dr Somervell Memorial CSI Medical College & Hospital, Thiruvanathapuram, Kerala, [2-4]Sri Manakula Vinayagar Medical College and Hospital, Pondicherry University, India

***Correspondng Author: Yuvarajan S**
Email: nsivagnaname@yahoo.com

Abstract

Background: Chronic Obstructive Pulmonary Disease (COPD), is preventable and treatable disease which poses significant public health challenge. The impact of COPD on an individual patient doesn't depend solely on the severity of airway obstruction, but also on the progression of clinical symptoms. A significant number of COPD patients suffer from tissue hypoxia and impaired oxidative metabolism. Hence this study was done to assess the progression of the disease by measuring the level of serum uric acid (UA) and serum uric acid to creatinine ratio (UA/Cr) in these patients.

Methodology: This hospital based cross sectional study was carried out in the department of Respiratory Medicine, in a tertiary care hospital from September 2017 to December 2018 on sixty COPD patients. Serum uric acid and creatinine were assessed with the Uricase and Modified Jaffe's method respectively. Finally serum uric acid creatinine ratio was calculated.

Results: The mean level of serum uric acid (UA) in COPD patients with mild, moderate, severe and very severe obstruction were 2.62(mg/dl), 3.81(mg/dl), 4.53(mg/dl) and 5.72(mg/dl) respectively. The levels of serum uric acid to creatinine ratio in patients with mild, moderate, severe and very severe obstruction were in the mean of 2.24, 3.60, 5.12, and 8.12 respectively. Thus, both serum uric acid levels and serum uric acid to creatinine ratio increased with increase in the severity of airflow obstruction in patients with stable COPD which was statistically significant ($p<0.005$).

Conclusions: Thus, the levels of serum uric acid and serum UA/Cr ratio is raised in stable COPD patients and correlates with severity of airway obstruction. Thus serum UA/Cr ratio can be a useful marker to monitor the disease severity in addition to spirometric parameters like FVC, FEV1 and FEV1/FVC.

Keywords: Serum uric acid, Serum uric acid creatinine ratio, COPD.

Introduction

Chronic Obstructive Pulmonary Disease (COPD), is preventable and treatable disease which poses significant public health challenge. Globally, the number of COPD patients has been showing increasing trend because of continued exposure to COPD risk factors and aging of the population [1]. (Global initiative, 2015)

The report published by the Maharashtra State Health Resource Centre states that, COPD is the leading cause of death in Maharashtra, more than Ischemic Heart Disease, Stroke, Diabetes Mellitus all taken together [2,3]. In one of the pioneering studies in India, a large multi-centric general population based survey was undertaken using a structured questionnaire in adults (aged more than 35 years) and discovered that the prevalence of COPD was 4.1% with a prevalence of 5% in males and 3.2% in females [4].

GOLD guidelines insisted on performing spirometry to make the diagnosis of COPD in a clinical context, where the presence of a post bronchodilator FEV_1 / FVC is less than 0.70. In addition to it, there are certain key indicators that GOLD lays down especially in a patient who is above forty years of age. These key indicators include, persistent dyspnea that is characteristically worse with exercise, chronic cough that may be intermittent and non-productive are the prominent indicators. Chronic sputum production is the third indicator [5]. A history of exposure to risk factors like tobacco smoke (that includes popular local preparations also) or smoke from home cooking and heating fuels or occupational dusts and chemicals is yet another key indicator [6].

Most of the patients with COPD suffer from tissue hypoxia and impaired oxidative metabolism. Hence this study was proposed to assess the progression of the disease by measuring the level of serum uric acid (UA) and serum uric acid to creatinine ratio (UA/Cr) in these patients. Serum UA, being the final product of purine degradation. Serum UA has been proposed as a marker for impaired oxidative metabolism [6]. However, serum UA levels are also altered by factors such as sex, body mass index (BMI), alcoholism, blood pressure (BP), and renal function, as indicated by serum creatinine concentration [7]. Therefore, a study was undertaken to assess whether the presence of higher values of serum UA and serum UA to creatinine ratio (UA/Cr) are associated with clinical or functional characteristics in patients with COPD.

Materials and Methods

This hospital based cross sectional study was carried out in the department of Respiratory Medicine in a tertiary care hospital from September 2017 to December 2018 on sixty COPD patients (sample size was calculated based on the prevalence and study subjects from the previous study using free cal software) [6]. This study was carried after approval from the institutional ethics committee.

Patients with symptoms of chronic cough and breathlessness were subjected to spirometry after ruling out

Print ISSN: 2319-2003 | Online ISSN: 2279-0780

IJBCP International Journal of Basic & Clinical Pharmacology

DOI: http://dx.doi.org/10.18203/2319-2003.ijbcp20194270

Original Research Article

A retrospective analysis of acute poisoning cases admitted to a tertiary care hospital in South India

Nishanthi Anandabaskar[1], Reveda Murugan[1], Nitya Selvaraj[1], Mohanasundaram Jayaraman[1]*, Meher Ali Rajamohammad[1], Rajendrakumar Nivaratirao Kagne[2]

[1]Department of Pharmacology, [2]Department of Forensic Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, Tamil Nadu, India

Received: 26 July 2019
Accepted: 06 September 2019

***Correspondence to:**
Dr. Mohanasundaram Jayaraman,
Email: mohanasundaramj@gmail.com

ABSTRACT

Background: Acute poisoning is a medical emergency and a global public health problem. The poisoning pattern varies across countries and even between different regions within a country. The aim of this was to explore the demographic, etiological, and clinical characteristics of acute poisoning cases admitted to a tertiary care hospital in Puducherry, South India.

Methods: This was a retrospective hospital record based study of acute poisoning cases admitted to our hospital during the period from January 2015 to December 2017. The patients' demographic, etiological and clinical characteristics were analyzed.

Results: Of the total of 275 cases of acute poisoning, majority of them were in the age group of 21- 30 years (32%) and were females (58.5%). Most of the cases were suicidal in nature (75.3%). Majority of the patients consumed a single poisonous agent (92.7%) and the route of poisoning was oral in all of them. Majority of the patients (56.7%) reached the hospital within 2 hours of exposure to the poison with median duration of hospital stay of 2 days, and mortality of 2.9%. Majority of the suicidal poisonings were associated with abuse of insecticides (39.4%), rodenticides (19.7%) and plant seeds (14.4%), whereas the accidental poisonings were mostly due to household agents (79.1%).

Conclusions: Our study shows that the majority of the poisoning cases occurred with a single poisonous agent consumed orally, for suicidal purposes in young age group and women. Pesticides and plant seeds were commonly abused for committing suicides and household agents dominated the list of causes for accidental poisoning.

Keywords: Acute poisoning, Emergency, Pesticides, Suicide

INTRODUCTION

Acute poisoning is a medical emergency and is a common problem worldwide. Poison is a substance that causes injury to the body or causes death, when administered by any route. Acute poisoning refers to exposure to the poisonous substance within a period of less than 24 hours.[1] In India, the incidence of poisoning cases is found to be increasing every year. The average incidence of acute poisoning cases was 1.60 per 1000 population, while the average case fatality rate and mortality rates were 40.51 and 0.07, respectively in a tertiary care hospital in South India.[2]

The most common cause of acute poisoning in south India is organophosphorous poisoning.[3,4] Other common cause of poisoning includes poisoning with yellow oleander, tablets (paracetamol and sedatives), corrosives, rat killer, organocarbamate, datura and phenol.[3] The intention for acute poisonings could be suicidal or accidental. Majority of the cases encountered in a tertiary care hospital in South India were due to suicidal intentions.[3] In another study it was found that the most

ACHONDROPLASIA- A RARE CASE REPORT

Sabita Pulavarthi[1], Suba Ananthi Kumarasamy[2], Umamageswari Amirthalingam[3]

[1]Associate Professor, Department of Obstetrics and Gynaecology, Indira Gandhi Medical College and Research Institute, Puducherry, India.
[2]Associate Professor, Department of Anatomy, Indira Gandhi Medical College and Research Institute, Puducherry, India.
[3]Associate Professor, Department of Radiodiagnosis, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.

HOW TO CITE THIS ARTICLE: Pulavarthi S, Kumarasamy SA, Amirthalingam U. Achondroplasia- a rare case report. J. Evolution Med. Dent. Sci. 2019;8(18):1517-1518, DOI: 10.14260/jemds/2019/336

PRESENTATION OF CASE

A 29-year-old female patient, G2P1L1 of 32 weeks' gestation, who has not attended any antenatal clinic, presented with premature rupture of membrane, to the Department of Obstetrics and Gynaecology, delivered a still born female baby with bilateral short upper and lower limbs, proptosis, depressed nasal bridge, short neck, narrow thoracic cage, protuberant abdomen and redundant skin folds (Figure 1). There was no significant family history or consanguineous marriage. No history of any infection and drug intake during the gestation period. She had delivered a normal male baby in the same institute in 2013.

DIFFERENTIAL DIAGNOSIS

- Thanatophoric Dysplasia.
- Homozygous Achondroplasia.
- Osteogenesis Imperfecta.
- Achondrogenesis.

CLINICAL DIAGNOSIS

The baby was diagnosed as a case of Achondrogenesis (AG) with clinical presentation of micromelia, short trunk and protuberant abdomen. Postnatal X-ray and CT Scan was done to visualize the morphology of the limb bones and other associated anomalies. Normal ossifications of cranial bones were noted. Both upper and lower limb bones were short. Femur was very short, broad with metaphyseal cupping, platyspondyly vertebral bodies, abnormal scapula with short ribs were observed. Absence of ossification of sacrum, ischia and pubis was observed (Figure 2).

PATHOLOGICAL DISCUSSION

Histopathologically, the physeal growth zone in both AG I and II shows severe retardation and disorganisation. The resting cartilage of AG IA has large PAS-positive diastase-resistant spherical or oval chondrocytic inclusions in membrane bound vacuoles.[1,2] But AG IB has unusual perichondrocytic collagen rings which are strongly reactive with silver methenamine, trichrome or toluidine blue stain with absent intervening matrix, due to decrease of type II collagen.[3]

The histopathological changes of the resting cartilage are characteristic with significant deficiency of matrix and markedly enlarged lacunae. Cartilage canals are markedly enlarged, stellate in shape and fibrotic. Immunohistochemical studies reveal the predominant collagen of cartilage is type I rather than type II which is normally found, confirming that it is a disorder of type II collagen biosynthesis.[4]

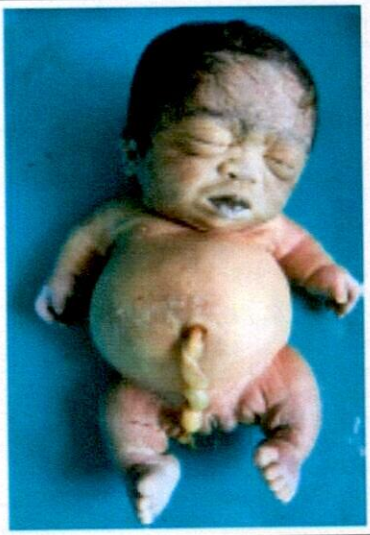


Figure 1. Still Born Baby with Micromelia, Short Trunk and Protuberant Abdomen

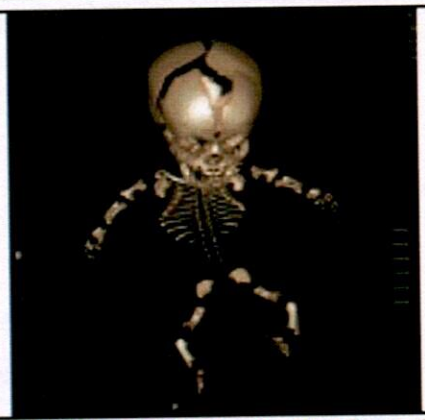


Figure 2. Image of CT Scan Showing Short Femur with Metaphyseal Cupping with Absence of Ossification of Sacrum, Ischia and Pubis

'Financial or Other Competing Interest': None.
Submission 14-03-2019, Peer Review 19-04-2019,
Acceptance 25-04-2019, Published 06-05-2019.
Corresponding Author:
Dr. Suba Ananthi Kumarasamy,
Associate Professor,
Department of Anatomy,
Indira Gandhi Medical College and Research Institute,
Kathirakamam, Pondicherry-605009, India.
E-mail: subasam@yahoo.com
DOI: 10.14260/jemds/2019/336

JMSCR Vol||07||Issue||05||Page 936-939||May 2019

www.jmscr.igmpublication.org
Index Copernicus Value: 79.54
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v7i5.152

Journal Of Medical Science And Clinical Research

Cerebral Proliferative Angiopathy- A Rare Case Report

Authors
Madhumita Chandrasekaran, Elamparidhi Padmanaban, Kaviya Varshini. K.S, Kulasekaran. N
Corresponding Author
Dr Madhumita Chandrasekaran

Abstract
Cerebral proliferate angiopathy is a rare congenital vascular malformation due to anomalous cerebral angiogenesis causing abnormal cerebral vascular architecture, which differ from other classical arterio – venous malformations. Here we report a case cerebral proliferative angiopathy in a 42 years old male patient which seizure disorder and left hemiparesis. It is essential now to recognize this entity to avoid aggressive treatment or intervention thus we can achieve better prognosis.

Case Report

A 42year old male patient presented with multiple episodes of seizure for past 15 years which is aggravated for past 3 months. Past medial history of cerebrovascular accident 5 year back with left heni paresis. Patient is also on treatment for diabetes and hypertension. No detectable skin lesion. There is no significant family history of AVM. Laboratory investigations were unremarkable.

Imaging findings:

Non-contrast computed tomography of the brain performed to evaluated seizure disorder reveled multiple dilated tortuous vessels in left side of perimesencephalic cistern extending into quadrigeminal cistern these vessels are causing compression and displacement of mid brain. Area of gliosis noted in right parietal region. Multiple foci of serpingenous calcification seen in bilateral cerebral hemispheres in both supratentorial and infratentorial parenchyma. They are predominantly located in right parietal region in a gyriform pattern.

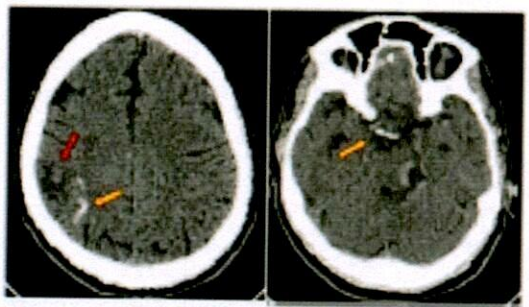


Fig: 1 & 2 Non enhanced CT axial image showing tortuous hyperdense lesion (yellow arrow) seen in cerebral hemisphere, left CP angle and ambient cisterns, (left image) foci of gliosis in the right parieto - temporal region (red arrow).

Contrast enhanced computed tomography imaging demonstrated dilated tortuous pial and intra

Neurospine 2019;16(4):748-755.
https://doi.org/10.14245/ns.1836272.136

Neurospine
pISSN 2586-6583 eISSN 2586-6591

Original Article

Morphometry of the Uncinate Process, Vertebral Body, and Lamina of the C3–7 Vertebrae Relevant to Cervical Spine Surgery

Veeramani Raveendranath[1], Thangarasu Kavitha[1], Amirthalingam Umamageswari[2]

[1]Department of Anatomy, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry, India
[2]Department of Radiodiagnosis, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Corresponding Author
Raveendranath Veeramani
https://orcid.org/0000-0003-0615-5612

Department of Anatomy, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Dhanvantari Nagar, Pondicherry 605006, India
Tel: +919043997352
E-mail: dr_raveendra@rediffmail.com

Received: November 13, 2018
Revised: January 9, 2019
Accepted: March 4, 2019

Objective: The cervical spine consists of 4 typical and 3 atypical vertebrae. The uncinate process is one of the unique features of the cervical vertebrae. Uncinectomy and uncoforaminotomy are widely used to decompress the nerve in the intervertebral foramen and to remove osteophytes from the uncinate process. Morphometric analyses of the uncinate process help spine surgeons obtain a 3-dimensional orientation for approaching the cervical spine with minimal risk to the surrounding vascular and neural structures. This study aims to analyze the morphometry of uncinate process of cervical vertebrae with relevant to cervical spine surgery.

Methods: Eighty dry adult cervical vertebrae were studied, and 11 parameters were measured. Seven parameters were paired and 4 were unpaired.

Results: The height of the uncinate process progressively increased from C3 to C6 and decreased at C7. The length of the uncinate process increased from C3 to C6–7. The width was greatest at C6 and smallest at C3. The vertebral body width and anteroposterior diameter gradually increased from C3 to C7. The parameters of the lamina also increased from C3 to C7.

Conclusion: Precise knowledge about the cervical vertebrae is useful for diagnosing both common and uncommon causes of symptoms and for choosing an appropriate approach. Thus, it helps to increase the success rate of cervical surgery.

Keywords: Cervical vertebrae, Morphometry, Uncinate process

INTRODUCTION

The axial skeleton of neck comprises 7 cervical vertebrae. Out of which, 4 vertebrae (C3–6) are typical and 3 vertebrae (C1, C2, and C7) are atypical. Each typical vertebra consists of vertebral body and the neural arch formed by pedicles, articulating processes, laminae and spinous process.

Uncinate process is a bony projection, also known as "eminentia costaria, processus uncinatus," present on the posterolateral margin of the superior surface of lower cervical vertebrae (C3–7) which encroach on the inferior surface of the above vertebra to form unco-vertebral joint (UVJ) or Luschka joint.[1] The UVJ forms the medial boundary of the vertebral foramen. The uncinate process was classified into 3 types based on the encroachment over adjacent intervertebral foramen. Type I – Uncinate process does not encroach upon the adjacent intervertebral foramen. Type II – encroach upon adjacent foramen without deformation. Type III – encroach upon adjacent foramen with deformation of uncinate process.[2] So, the type of uncinate process can also be an uncommon cause of radiculopathy. In such cases, it carries the importance during manipulation of uncinate process in spine procedure.

Morphological characteristics of cervical vertebrae are an important factor for maintaining the normal cervical lordosis and

DOI: 10.7860/IJARS/2019/37314.2406

Original Article

Radiology Section

Correlation of Carotid Artery Doppler with Risk Factors and Computed Tomography Brain in Patients with Ischemic Cerebrovascular Accident

R CHITRAH[1], S SIVARANJINI[2], D PADMAREKA[3], A UMAMAGESWARI[4], P ELAMPARIDHI[5], R SIBHITHRAN[6]

ABSTRACT

Introduction: Ischemic Cerebrovascular Accident (CVA) is a leading cause of morbidity and mortality in the world. Atherosclerosis of blood vessels supplying the brain is one of the common reasons. The risk of patients with stroke due to atherosclerosis is closely associated with severity of the luminal stenosis. Carotid sonography without preoperative angiography is becoming increasingly common before carotid endarterectomy.

Aim: To correlate carotid artery Doppler and Computed Tomography- Brain findings in patients with Ischemic CVA and also to correlate carotid Doppler with individual risk factors for carotid artery disease in South Indian population.

Materials and Methods: This study was designed to evaluate patients with (Transient Ischemic Attack) TIA and Ischemic CVA in 100 patients presented to hospital. Risk factors like hypertension, diabetes, smoking, hyperlipidemia, alcohol consumption, heart disease, previous history and present CT findings were recorded. Intima media thickness, plaque morphology, percentage of stenosis, luminal colour flow, the systolic and diastolic velocities were also calculated and recorded.

Results: In the present study there was a significant association (p-value of 0.001) between size of infarct and amount of stenosis in Internal Carotid Artery (ICA). There was also significant association (with p-value < 0.05) in risk factors profile among stroke and TIA subjects with respect to hypertension, smoking, alcohol, hyperlipidemia and previous history of stroke. There was significant association (p-value of 0.013) between plaque characterization and stroke/TIA. Most common characteristic of plaque was soft in both the groups. Most common site of plaque among stroke was right ICA and in TIA was Left bulb respectively.

Conclusion: There was high prevalence of carotid artery disease as evidenced by increased intima media thickness, plaques and significant stenosis of ICA as detected by colour doppler examination for stroke and TIA patients in this study. Also large infarcts in CT were seen in patients with significant stenosis. Hence, Carotid Doppler investigation plays an important role in prevention of stroke mainly in patients with risk factors like hypertension, smoking and hyperlipidemia although they are asymptomatic.

Keywords: Hyperlipidemia, Hypertension, Intima media thickness, Number of arteries showing significant stenosis, Smoking, Stroke

INTRODUCTION

WHO defines stroke as "the rapid development of clinical signs and symptoms of a focal neurological disturbance which lasts for more than 24 hours or leading to death with vascular origin as the cause" [1]. Stroke is the second most common cause of death worldwide. It is leading cause of disability in old age patients [1]. Ischemic stroke is more common and accounts for 50-85% of all the strokes worldwide [1]. Stroke is defined as ischemic if there is imaging (Computed Tomography or Magnetic Resonance Imaging within four weeks), surgical or autopsy evidence excluding haemorrhage, or in absence of such direct evidence if the indirect evidence (e.g., deficit limited to one limb or completely resolving within 72 hours, atrial fibrillation in persons not on anticoagulants) suggest ischemic rather than a haemorrhagic stroke [2].

Carotid artery disease is a major risk factor for Transient Ischemic Attack (TIA) and stroke. Carotid artery stenosis or atheromatous plaque formation is the major cause for stroke. For patients with stroke or TIA, sonological evaluation of carotids and Doppler helps to prevent further attacks in patients with stroke and also in preventing the occurrence of stroke in patients with TIA.

Ultrasound is an inexpensive, non invasive and highly accurate method for diagnosing carotid stenosis. It helps to assess the plaque morphology [3,4]. Angiography has been largely replaced by carotid artery Doppler as the principal screening method for suspected extra cranial carotid artery atherosclerosis. Carotid ultrasound can be the only modality of choice before performing a carotid endarterectomy [5].

If the risk factors are identified and detected early, appropriate management can be instituted in an asymptomatic patients with risk factors which will slow down the progression of carotid artery disease. This study was done to establish the carotid artery involvement in the patients with stroke and TIA and to study the most common non communicable risk factor associated with stroke and TIA in this population.

MATERIALS AND METHODS

In this study a prospective analysis of 100 patients, who presented with clinical symptomatology of TIA and stroke and were referred to the Department of Radio-Diagnosis at Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India, for CT-Brain from the period of September 2015 to September 2017. Patients with symptoms of stroke and TIA such as transient episodes of neurological dysfunction, sudden loss of consciousness, altered sensorium, aphasia, diminution of vision or loss of vision were included in this study. Patients with evidence of haemorrhagic stroke, stroke due

DOI: 10.7860/IJARS/2019/41035:2490

Original Article

Radiology Section

Vascular Loops at the Cerebellopontine Angle and their Correlation with Otological Symptoms

D PADMA REKA[1], AM ANAND[2], N KULASEKARAN[3], C BALACHANDRAN[4], P ELAMPARIDHI[5], R SIBHITHRAN[6]

ABSTRACT

Introduction: The most common otologic symptoms include hearing loss, tinnitus and dizziness. Cerebellopontine angle is an anatomical structure at which the vascular and neural structures highly interact with each other. The neurovascular structures in this region includes cranial nerves V, VII, VIII, Anterior Inferior Cerebellar Artery (AICA), auditory artery, branches of petrosal vein, vein of middle cerebellar peduncle, vein of lateral recess of 4th ventricle and transverse pontine vein.

Aim: To determine the course of the vascular loops in cerebellopontine angle and to assess the relationship between the vascular loops in cerebellopontine angle with otological symptoms.

Materials and Methods: A retrospective study was conducted on 40 patients with otological symptoms using Magnetic Resonance Imaging (MRI) at our institution between June 2017 to June 2018. Grading of the AICA vascular loops according to Chavda classification was done. Chi-square test was done. The p-value < 0.05 was considered statistically significant.

Results: No association between Chavda grade of vascular loops of AICA at the cerebellopontine angle and otological symptoms was found. The p-value was found to be >0.05 which is statistically insignificant (p-value for tinnitus-0.793, hearing loss-0.503, dizziness-0.300).

Conclusion: There is no association of the vascular loops with the otological symptoms. Hence, in view of the results obtained, the diagnosis of vascular compression syndromes should not be made only with the MRI imaging findings. Hence, vascular compression syndromes cannot be attributed as an aetiological factor for otological symptoms.

Keywords: Chavda classification, Dizziness, Hearing loss, Tinnitus

INTRODUCTION

The most common otologic symptoms include hearing loss, tinnitus and dizziness [1]. The prevalence of otological symptoms in south Indian population is 2% for tinnitus, 66% for sensorineural hearing loss, 11% dizziness [2]. Tinnitus is a sound in the ear, produced without an external stimulus. There are two types of tinnitus-pulsatile and non-pulsatile. Although otologic symptoms are associated with various diseases, the proper cause is not always identified [3]. Pulsatile tinnitus can be further subdivided into arterial and venous pulsatile tinnitus. Non-pulsatile tinnitus caused by a microvascular compression of the VIIIth cranial nerve which can be subdivided into high pitch and low pitch tinnitus [4].

The successful approach to the patient with tinnitus begins by differentiating objective from subjective tinnitus. Patients with objective tinnitus are hearing real sounds. Low-pitched buzzing and clicking probably denote palatal myoclonus/tensor tympani and stapedius muscle contractions. Subjective tinnitus, which we refer to as tinnitus, is the false perception of sound in the absence of an acoustic stimulus [5].

Cerebellopontine angle is an anatomical structure at which the vascular and neural structures highly interact with each other. The neurovascular structures in this region includes cranial nerves V, VII, VIII, AICA, auditory artery, branches of petrosal vein, vein of middle cerebellar peduncle, vein of lateral recess of 4th ventricle and transverse pontine vein [6]. Medial portion of the cerebellopontine angle is the region between mid-brain (mesencephalon), pons, medulla, petrous bone, tentorium, and cerebellum. There are three fissures in this region: cerebellomesencephalic fissure superiorly, cerebellopontine fissure in the middle, and cerebellomedullary fissure inferiorly. The superior fissure contains Superior Cerebellar Artery (SCA) and cerebellomesencephalic vein. AICA and cerebellopontine fissure vein are located in the middle fissure. The inferior fissure contains Posterior Inferior Cerebellar Artery (PICA) and cerebellomedullary fissure vein. Cerebellar flocculus hide the root entry zone of the vestibulocochlear nerve [7]. Anatomical interactions between these vascular and neural structures may manifest as vascular compression syndrome.

Vascular compression of the fifth cranial nerve resulting in trigeminal neuralgia was first suggested by Dandy in 1934 and later by Gardner and Miklos in 1959. This concept was then widely applied to explain disorders of various cranial nerves. These are known as the compression syndromes, which include hemifacial spasm, glossopharyngeal neuralgia, geniculate neuralgia, and a vestibulocochlear nerve compression syndrome [8]. Trigeminal neuralgia, hemifacial spasm, glossopharyngeal neuralgia, tinnitus, and vertigo are examples of the neurovascular compression syndrome [9].

The purpose of the study was to assess the relationship between the vascular loop in cerebellopontine angle and the otological symptoms.

MATERIALS AND METHODS

A retrospective study was conducted on 40 patients with otological symptoms by using MRI in the Department of Radiology at Sri Manakula Vinayagar Medical College and Hospital (SMVMCH) Puducherry, India between June 2017 to June 2018. Patients with otological symptoms (tinnitus, sensorineural hearing loss, dizziness) who had undergone MRI brain were included for study. The exclusion criteria include patients with metallic implants or pacemaker, claustrophobic patients and patients who were already diagnosed with brain lesion or any vascular lesions. The sample comprises of 25 male (62%) and 15 female (38%) with mean age of 46.5 years (range-21 to 80 years).

Original Article

DOI: 10.5455/IJAR20210[illegible]

Radiology Section

Comparison of Carotid Artery Intima-media Thickness and Resistive Index by Ultrasound and Colour Doppler in Pre-hypertensives and Stage One Hypertensives

SUBHA VENKATACHALAM[1], UMAMACESWARI AMIRTHALINGAM[2], ELAMPARIDHI PADMANABAN[3], KULASEKARAN MADHAMUNI[4], BALACHANDIRAN COPALARATHNAM[5], NAGARAJAN KINATHANKARAYAN[6]

ABSTRACT

Introduction: Pre-hypertension and stage one hypertension remains major public health problem in both developed and developing countries. It primarily affects elastic arteries, hence common carotid artery Intima-Media Thickness (IMT) and Resistive Index (RI) considered an early predictor of cerebrovascular and cardiovascular complications.

Aim: This study was aimed to assess common carotid artery IMT and Resistive Index in pre-hypertensives and stage one hypertensive patients and to compare the findings between both groups.

Materials and Methods: The study design was hospital based cross sectional study and was conducted in Sri Manakula Vinayagar Medical College and Hospital, Pondicherry. Forty non diabetic patients in the age group of 25-65 years were examined for carotid artery Doppler. The patients were divided into prehypertensives and stage I hypertensives. Bilateral common carotid artery IMT and RI were evaluated.

Results: Among the 40 patients studied, 24 patients were prehypertensives and 16 were stage I hypertensives, 70% were females and 30% were males. Palpitation was the commonest presenting symptom. Mean Systolic blood pressure was 128.25±4.66 in prehypertensives and 141.25±6.44 in stage I hypertensives. The mean IMT in both prehypertensives and stage I hypertensives was 0.06±0.01 on either side. Mean Resistive Index in prehypertensives was 0.73±0.08 on either side; while that in stage I hypertensives was 0.72±0.13 on right and 0.71±0.11 on left. However, no rise in IMT was observed with increasing age in both the groups. On comparison both the groups showed no significant difference in IMT and RI.

Conclusion: To conclude, both the prehypertensives and stage I hypertensives show similar pattern of IMT and RI of the common carotid artery.

Keywords: Palpitation, Pourcelot Index, Vascular resistance

INTRODUCTION

Development of atherosclerosis in vascular system occurs by various mechanisms, among which hypertension is an important and independent risk factor [1]. More than ninety-five percentages of hypertensive patients in the community are of essential, whereas only a small percentage has an identifiable cause which is known as secondary hypertension. The various systemic changes can be assessed by the atherosclerotic changes that take place in the carotid artery [2]. It increases the risk of stroke, coronary artery disease and peripheral arterial disease by two-three folds with risk being proportional to the severity of hypertension [3].

Increase in IMT of an artery has been used as a surrogate marker of subclinical atherosclerosis and early detection of vascular events [3]. B-mode ultrasound of carotid arteries is a non-invasive, safe, inexpensive, sensitive, valid and reproducible method of directly assessing IMT [4]. The intima-media complex is made up of various elements like the endothelial cells, connective tissue and smooth muscle. This complex is measuring sonographically as the IMT [5].

The velocity of blood flowing via the carotid artery can be determined by colour Doppler [6]. There are multiple ways to increase the accuracy of the results, few of which are Doppler angle, sample volume box and colour gain [7].

According to Pourcelot RI is a haemodynamic parameter, which is determined by Doppler Sonography basically reflecting the vascular resistance which in turn depends on distensibility of the vessel [8].

The present study aimed to evaluate the common carotid artery IMT and RI by Ultrasound and Colour Doppler in prehypertensives and stage one hypertensive patients and to compare the findings between prehypertensives and stage one hypertensives.

MATERIALS AND METHODS

The study design was hospital based cross sectional study and was conducted in department of Radio-Diagnosis at Sri Manakula Vinayagar Medical College and Hospital, Puducherry. The study was approved by the institute ethics committee. The duration of study was six months. Stage I hypertensive and prehypertensive subjects in the age group of 25 to 60 years were included. Those with history of Diabetes mellitus and hyperlipidemia were excluded from the study.

The subjects were divided as follows: Prehypertensives: Systolic Blood pressure: 120-139 mmHg or Diastolic Blood pressure: 80-89 mmHg; Stage I hypertensives: Systolic Blood pressure: 140-159 mmHg or Diastolic Blood pressure: 90-99 mmHg [9].

After obtaining informed consent, ultrasonography and doppler was performed using GE-voluson-S6 scanner with 7.5-10 MHz linear array transducer.

IMT defined as the distance between leading edge of the lumen-intima echo and leading edge of the media-adventitia echo is measured 1.5 cm proximal to its bifurcation. Then pulsed-Doppler carried out in Common Carotid Artery (CCA) 1.5 cm proximal to its bifurcation with maximum Doppler angle of 60°. The maximum systolic and minimum diastolic flow rates were determined and RI was calculated automatically in a cycle by means of in-built software.

Review Article

A Comprehensive Review of the Anatomy of Popliteus and Its Clinico-Surgical Relevance

Deepa Somanath, Sudha Ramalingam

Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

An extensive anatomical knowledge of the muscle popliteus and its tendon is indispensable to understand the posterolateral structures of the knee which is prone to injury compared to the medial knee structures. This study describes all the relevant anatomical details of the muscle and its clinical significance. Anatomical and clinical terms regarding the popliteus muscle are searched using databases and search engines for the collection of literature review. Abstracts and articles describing the posterolateral corner (PLC) structures apart from the muscle studied were excluded. Seventy-six articles were adopted using the inclusion and exclusion criteria, among which 62 articles had fulfilled the need. Original articles dealing with morphology and morphometric analysis of popliteus muscle are scarce. Hence, the finer details of the anatomy of the muscle in various populations are unavailable, which is considered as a deficiency of the study. This article deals with the morphology of the popliteus and its clinical and surgical implications pertaining to the PLC of the knee.

Keywords: Popliteofibular ligament, popliteomeniscal fascicles, popliteus muscle tendon unit, popliteus tear, posterolateral corner

Introduction

The intricate anatomy of the posterolateral corner (PLC) of the knee is intriguing. To understand this complexity, the comprehensive structure of the popliteus (PS) muscle and its tendon is a prerequisite [Figure 1]. The PS muscle is a deep muscle of the posterior compartment of the leg on the lower part of the floor of the popliteal fossa. It takes its muscular origin from the medial border of tibia, soleal line, supra-soleal space, part of the bone forming a boundary above the supra-soleal space, and few muscle fibers from the fibula between soleus and tibialis posterior and above the peroneo-tibial band, and all these muscle fibers form the ovoid tendon which grooves the lateral meniscus (LM) [Figure 1]. Then, it runs upward rubbing against the caudal part of the articular surface of the lateral femoral condyle and finally gets inserted into the sulcus in front and just below the fibular collateral ligament (FCL) [Figure 1].[1] The musculo-tendinous junction (MTJ) complex makes up part of the PLC of the knee. Because its main function is to stabilize the lateral rotation between the femur and tibia, in case of its injury or involvement of PLC structures, a thorough knowledge of the PS is necessary to treat such ailments.[2] Hence, this article deals with the anatomy and its clinico-surgical implications.

Access this article online

Quick Response Code:

Website: www.jotr.in

DOI: 10.4103/jotr.jotr_59_19

Materials and Methods

This article followed PRISMA guidelines, wherein the databases and search engines used for the collection of literature review regarding the popliteus muscle are PubMed, Mendeley, Google Scholar, Google, Cochrane, ProQuest, and Sci-Hub.

Search terms used were popliteus, unlocking muscle, lateral condyle of femur, fibular collateral ligament, popliteo-meniscal fascicles, popliteofibular ligament, popliteus muscle-tendon unit, posterolateral corner, and popliteus tear. Search phrases such as anatomy of the popliteus, morphometric analysis of the popliteus, injuries to the posterolateral corner of knee, and clinical aspects of popliteus were used. Full articles in English regarding the human anatomy, embryology, and morphometric analysis of popliteus as well as comparative anatomy and

Address for correspondence: Dr. Sudha Ramalingam, Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry - 605 107, India.
E-mail: sudhaanatomy@gmail.com

How to cite this article: Somanath D, Ramalingam S. A comprehensive review of the anatomy of popliteus and its clinico-surgical relevance. J Orthop Traumatol Rehabil 2020;12:107-14.

Submission: 31.12.2019 **Revision:** 20.05.2020
Acceptance: 20.04.2020 **Web Publication:** 28.12.2020

JMS 2019;2(1):12-17
UDC:616.316.3-007.256

A rare occurrence of unilateral duplication of Wharton's duct with their intra-sublingual glandular course: a cadaveric report

Sudha Ramalingam. B.P.T., M.Sc[1], Deepa Somanath. B.H.M.S., M.Sc[2],
[1,2]Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital

Abstract

Anatomical variations regarding the salivary glands and their ducts have been observed in previous studies. But the occurrence of accessory submandibular gland duct is less common. In this study, we report a male cadaver with duplicated submandibular duct on the right side. The right upper submandibular duct (main duct) emerged from the anterior aspect of the deep part of the gland, ran its course forward, then pierced the posterior aspect of the sublingual gland and within the gland it ran forward and opened on the posterior aspect of sublingual papilla on the floor of mouth. The lower submandibular duct (accessory duct) also commenced from the anterior aspect of the deep part of the submandibular gland, ran forward just below and superficial to the upper duct and entered the anterior aspect of the sublingual gland and finally opened on the anterior aspect of sublingual papilla separately. Here, the embryological basis for the development of duplicated ducts and its clinical relevance is discussed.

Key words: accessory submandibular duct, duplicated salivary duct, sialography, sialolith, Wharton's duct

Introduction

Submandibular gland (SMG) is one of the major salivary glands located in the submandibular region of the neck. It is the first salivary gland to develop at 11.5 day of embryonic life followed by parotid and sublingual gland (SLG). The epithelium of oral cavity invaginates into the surrounding mesenchyme and shows numerous branching pattern. The terminal part of the cord remains as acini and the proximal part forms the duct [1]. The SMG duct (Wharton's duct) normally emerges from the medial surface of the superficial part after receiving many tributaries at the level of posterior border of mylohyoid muscle. It then runs within the deep part of the gland and passes upward and slightly backward for 5mm.This bend called genu which lies over the posterior border of mylohyoid muscle [2] with an angle of 102.7 degree [3]. The duct then passes forward between lingual and hypoglossal nerves on the hyoglossus muscle deep to the mylohyoid muscle. At the anterior border of hyoglossus, the duct is crossed from lateral to medial by lingual nerve and runs forward medial to the SLG and finally terminates on the sublingual papilla on the floor of mouth. Complete narrowing of the duct is defined as a kink which is observed at the hilar region, at or near the genu. Kinking may be produced by protrusion of adjacent tissue beneath the duct or because of the loosening of mylohyoid muscle [3].The normo morpho-anatomical factors regarding SMG main duct are narrow lumen, longer and uphill course, genu and kink which act as aetiological factors for the salivary obstructive diseases like sialolithiasis, sialadenitis. Additionally if there is an accessory duct which is usually narrower and longer than the main duct, then this factor augments the possibility of developing above said conditions.

Anatomical variations can involve the number and size of the glands or their ducts. In this study we report a case with duplicated SMG duct on the right side of a male cadaver.

In a routine dissection of neck for undergraduate students of Sri Manakula Vinayagar Medical College and Hospital in the Department of Anatomy, it was noted in a male cadaver of 50 years of age, that the SMG duct on the right side was duplicated while the on the left side it was normal. The right upper SMG duct (main duct) (Fig.1,2) emerged from the anterior aspect of deep part of the gland, ran its course forward and it was crossed by lingual nerve from lateral to medial side by winding around its inferior aspect near the SLG where duct was closer to the gland than the lingual nerve. It then pierced the posterior aspect of the gland and within the gland it ran forward and opened on the posterior aspect of sublingual papilla on the floor of mouth. On its entire course it was lying

Case Report

Unilateral and isolated absence of opponens pollicis and adductor pollicis: Could it be Cavanagh's syndrome?

N. A. Priyadharshini, V. Dinesh Kumar[1], R. Rajprasath[2]

Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, [1]Department of Anatomy, Jawaharlal Institute of Postgraduate Medical Education and Research, [2]Department of Anatomy, Pondicherry Institute of Medical Sciences, Puducherry, India

Abstract Functions of the human hand such as grasping and releasing require synchronous action of thenar muscles and thereby require considerable mechanical complexity. Isolated absence of thenar muscles is often reported in association with syndromes such as Cavanagh's syndrome or Holt–Oram syndrome (in addition to cardiac defects). During routine anatomical dissection of an approximately 55-year-old male formalin-embalmed cadaver, we observed a unique variation in the left palm where opponens pollicis and adductor pollicis muscle were completely devoid of muscle fibers and solely constituted by fibrous tissue. We could not make out any other nervous/vascular/musculoskeletal abnormalities or signs of surgical procedures on the left superior extremity. We followed a step-wise approach rule out possible clinical syndromes and etiologies. The presumable hypothesis would be focal deficiency in the proliferation of premyogenic cells in the limb bud. This rare variation would be of paramount importance to plastic surgeons who can offer surgical correction (tendon transfers) if presented at earlier ages.

Keywords: Adductor pollicis, Cavanagh's syndrome, opponens pollicis, thenar muscles

Address for correspondence: Dr. V. Dinesh Kumar, Department of Anatomy, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India.
E-mail: dinesh.8860@gmail.com
Received: 02.01.2019, **Accepted:** 19.02.2019

INTRODUCTION

The intrinsic muscles of the hand acting collectively on the thumb are grouped as thenar eminence. Functions of the human hand such as grasping and releasing require synchronous action of thenar muscles and thereby require considerable mechanical complexity.[1] Muscles of the thumb establish a "guy-rope" action in the metacarpal positioning, such that any activity is accompanied by rotation.[1] Isolated absence of thenar muscles is often reported in association with syndromes such as Cavanagh's syndrome[2] or Holt–Oram syndrome (in addition to cardiac defects).[3] Even though few clinical cases with congenital absence of thenar muscles[4,5] have been reported, many cases would have gone undiagnosed or been misdiagnosed. We present a rare case observed during cadaveric dissection, where opponens pollicis and adductor pollicis were absent only on the left hand. Owing to the rarity of presentation and importance in hand surgeries, this case report gains relevance.

CASE REPORT

During routine anatomical dissection of an approximately 55-year-old male formalin-embalmed cadaver, we observed

Access this article online	
Quick Response Code:	Website: http://www.jcrsmed.org
	DOI: 10.4103/jcrsm.jcrsm_46_18

How to cite this article: Priyadharshini NA, Kumar VD, Rajprasath R. Unilateral and isolated absence of opponens pollicis and adductor pollicis: Could it be Cavanagh's syndrome? J Curr Res Sci Med 2019;5:52-4.

International Journal of Anatomy and Research,
Int J Anat Res 2019, Vol 7(2.1):6462-67. ISSN 2321-4287
DOI: https://dx.doi.org/10.16965/ijar.2019.144

Original Research Article

DO THE DEAD ENLIGHTEN THE LIVING IN UNDERSTANDING ANATOMY?

Deepa Somanath [1], Sudha Ramalingam *[2].

[1, *2] Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.

ABSTRACT

Background: Cadaveric dissection is a traditional method to acquire the anatomical knowledge. Even though the advancement of multimedia and prosected specimens are changing the attitude of the students towards the replacement of dissection.

Purpose of the study: The aim of the study was to assess the attitude of students toward dissection, identifying the factors preventing them from learning and to obtain the suggestions for the improvement of learning in the dissection hall.

Materials and methods: It was a questionnaire based study which involved 140 students of first year undergraduates conducted at Sri Manakula Vinayagar Medical College and Hospital, Pondicherry.

Results: The pre and posttest questionnaires were completed by 140 students. The difference between pre and post test responses regarding the factors distracting the students from learning anatomy in the dissection hall was not statistically significant. Majority of the students opined that hands-on dissection is an important tool to learn gross anatomy even though the results were statistically insignificant.

Conclusion: However different methods of learning anatomy have evolved, the most effective way to understand gross anatomy is cadaveric teaching.

KEY WORDS: Gross anatomy, Cadaver, Dissection, Students' attitude.

Address for Correspondence: Sudha Ramalingam, Tutor, Department of Anatomy, Sri Manakula Vinayagar Medical College and Hospital, Puducherry – 605107, India. Phone: 0413-2642016, Fax: 0413-2641549 E-Mail: sudhaanatomy@gmail.com

Access this Article online	Journal Information
Quick Response code	International Journal of Anatomy and Research
	ICV for 2016 90.30 — ISSN (E) 2321-4287 | ISSN (P) 2321-8967
	https://www.ijmhr.org/ijar.htm
DOI: 10.16965/ijar.2019.144	DOI-Prefix: https://dx.doi.org/10.16965/ijar

Article Information	
Received: 12 Feb 2019	Accepted: 13 Mar 2019
Peer Review: 12 Feb 2019	Published (O): 05 Apr 2019
Revised: None	Published (P): 05 Apr 2019

INTRODUCTION

Attainment of knowledge in anatomy is significant which enhances the medical students' skill to comprehend the clinical scenario of the patient and treating the sick effectively [1]. It lays the basic foundation in medical curriculum. Cadaveric dissection is a traditional method adopted by many medical colleges globally. To acquire this knowledge, the students are exposed to cadaver. A chain of questions arise in students' mind when they encounter human cadaver like the source of cadaver, cause and time of death, embalming procedure, period of usage of cadaver etc. As many of them experience this for the first time, it is doubtless that most of them undergo an emotional stress [2] even though it is a matter of debate for the continuation of cadaveric dissection. The distressing factors a student undergo can be fear and smell of cadaver, shock at the sight of death, thoughts about death, intruding with privacy, sacrilege, mutilation and cultural taboo violation [3].

However, it is an area where the young minds

International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Parkavi M et al. Int J Reprod Contracept Obstet Gynecol. 2018 May;7(5):2002-2006
www.ijrcog.org

pISSN 2320-1770 | eISSN 2320-1789

DOI: http://dx.doi.org/10.18203/2320-1770.ijrcog20181946

Original Research Article

A study on association of preoperative anaemia and obesity with causes and postoperative outcome in women undergoing hysterectomy for abnormal uterine bleeding

S. Manju Parkavi, M. Jayasree*, R. Sasikala

Department of Obstetrics and Gynecology, Sri Manakula Vinayagar Medical College and Hospital, Pondicherry, India

Received: 08 March 2018
Accepted: 03 April 2018

***Correspondence:**
Dr. M. Jayasree,
E-mail: drmjayasree1@yahoo.co.in

ABSTRACT

Background: Abnormal uterine bleeding is most commonly encountered in 10-20% of women in reproductive age. The objectives of the study are to assess the proportion and association with causes and postoperative outcome of preoperative anaemia and obesity in women with abnormal uterine bleeding who underwent hysterectomy.

Methods: This was a retrospective observational record-based study conducted in the Dept. of Obstetrics and Gynaecology of Sri Manakula Vinayagar Medical College and Hospital(SMVMCH), Pondicherry. The study population consisted of 169 patients who were admitted for abnormal uterine bleeding and underwent hysterectomy from January 2016 to December 2016 for a period of one year.

Results: The mean age was 43years.The mean value of haemoglobin on admission was 9.89g/dl. The distribution frequencies of patients by WHO BMI classification as underweight, normal, overweight and obesity are 8, 59, 78 and 24 respectively. The distribution frequencies of patients by WHO anaemia classification as no anaemia, mild, moderate are 34, 37 and 98 respectively. Seventy-six patients had blood transfusion. Six patients had urinary tract infection and all of them were anaemic and obese. Two patients had developed respiratory tract infection and none of the patients had developed deep vein thrombosis.

Conclusions: Preoperative anaemia was more common in patients with fibroid and associated with increased morbidity in immediate postoperative period. There is more prevalence of SSI among overweight and obese women.

Keywords: Abnormal uterine bleeding, Hysterectomy, Overweight, Obesity, Preoperative anaemia

Original Article

Evaluation of skill-based training program on rational drug treatment for medical interns

Murugan Venkatesan[1], Amol R Dongre[1], Kalaiselvan Ganapathy[1]

[1]Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Context: A module-based training program for medical interns using World Health Organization guide for good prescription along with the individual feedback on their prescription was developed and implemented. **Objective:** The objective of the study was to obtain the medical interns' reactions to newly developed skill-based training program on rational treatment. **Study Setting:** This study was conducted at the Department of Community Medicine. **Participants:** A total of 96 medical interns were included in the study. **Study Design:** A cross-sectional study consisting of retro-prefeedback and open-ended questions about self-assessment of perceived skill on rational treatment. **Analysis:** Collected data were entered in Epi Info (3.5.4) and analyzed. **Results:** After training, there was a significant increase in self-perceived posttest scores of setting up the therapeutic objective for the treatment (2.9–4.8), ability to select the correct drug (2.8–5.1), ability to select right dose, schedule, and duration of drugs (2.5–4.8), and overall prescription skill (2.9–4.8). There is a significant decrease in self-perceived scores in the skill of practicing polypharmacy (4.1–2.5). **Conclusions:** Overall, the training program was taken well and interns perceived their skill on rational treatment was improved as shown by the feedback.

Keywords: Interns, medication errors, polypharmacy, prescriptions, training

Introduction

The irrational use of medicines is a problem worldwide, and the World Health Organization (WHO) estimates that more than half of the medicines prescribed, dispensed, or sold inappropriately.[1] Irrational prescription of drugs is responsible for the delay in relief, more adverse effects, prolonged hospitalization, increased morbidity and mortality, the emergence of microbial resistance, financial loss to patient and community, and perpetuation of public health problem.[2] WHO and Medical Council of India emphasize on problem-based pharmacotherapy training in undergraduate curriculum and continuing in-service medical education on rational drug prescription of medicines.[3]

Address for correspondence: Dr. Murugan Venkatesan, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry - 605 107, India.
E-mail: drmuruganm@gmail.com

Access this article online

Quick Response Code:

Website: www.jfmpc.com

DOI: 10.4103/jfmpc.jfmpc_179_17

In the undergraduate medical curriculum, traditionally pharmacology is usually taught in 2nd year, which is having a more drug-centered approach and when they come as medical interns, which is more disease centered making difficult for the students for learning.[4] The medical internship is the period, in which consolidation of undergraduate medical education through continued learning and skill acquisition under direct supervision and guidance from teachers. Studies in India also have indicated that the irrational prescribing practices are common in medical interns.[5,6] Medical interns prescribe by observing their clinical teachers, seniors, and colleagues which may lead to faulty practices without proper feedback on prescription. Rational prescription writing is a skill and it should be learned at the earliest since studies have shown that despite gains in clinical experience, prescribing skills will not improve after graduation.[7] They should develop a good attitude of prescription writing and rational drug as they constitute the future generation of doctors.[8] Literature shows that the available studies focus on improving the rational

How to cite this article: Venkatesan M, Dongre AR, Ganapathy K. Evaluation of skill-based training program on rational drug treatment for medical interns. J Family Med Prim Care 2017;6:832-6.

Original Article

Evaluation of Community-based Palliative Care Services: Perspectives from Various Stakeholders

Venugopal Vinayagamoorthy, Elayaperumal Suguna, Amol R Dongre

Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Background: As a part of Memorandum of Understanding with Tamil Nadu Institute of Palliative Medicine, community-based palliative care services have been initiated 2 years back in our urban field practice areas. **Aim:** The aim of this study was to evaluate the home care service, a major component of our community-based palliative care, with a view to identify the unmet needs of the services rendered for decision-making about the program. **Materials and Methods:** It was a descriptive qualitative design carried out by the authors trained in qualitative research methods. In-depth interviews were done among four patients, seven caregivers, two social workers, six nursing staffs, and six medical interns for a minimum of 20 min. Interviews were audiorecorded, transcribed verbatim, and content analysis was done manually. Ethical principles were adhered throughout the study. **Results:** Descriptive coding of the text information was done; later, similar codes were merged together to form the categories. Five categories under the theme of strengths and five codes under the theme of challenges of the home care services emerged out. Categories under strengths were physical management, psychological care, social support, efficient teamwork, and acceptance by the community. Codes for felt challenges were interdisciplinary collaboration, volunteer involvement, training enhancement, widening the services, and enhancing the community support. **Conclusions:** This review revealed the concerns of various stakeholders. There is a need for more interprofessional collaborations, where team members understand each other's roles for effective teamwork, as evident from the framework analysis.

Keywords: Community-based palliative care, framework analysis, home care, qualitative evaluation

Introduction

Community-based palliative care (CBPC) services are those offered at a community health center or that are run with community participation.[1] It is a nonhospital, nonhospice palliative care provided in patient homes, in clinic or over the phone.[2] It is generally patient-centered, comprehensive, and cost-effective. CBPC involves service delivery by both multidisciplinary teams of health-care professionals and community health workers/volunteers.[3] Home care service is the crux of the CBPC service. The ultimate goal of home-based care is to "promote, restore, and maintain a person's maximum level of comfort, function, and health, including care toward a dignified death."[4]

As a part of Memorandum of Understanding signed with Tamil Nadu Institute of Palliative Medicine, in the year 2015, CBPC services were established at four villages situated in the study setting, mentioned below. It was a new program initiated with limited preexisting resources, basic training, and planning. Hence, it was decided to carry out an internal evaluation, to illuminate on the unmet needs for further decision-making. The evaluation is primarily based on the detailed and comprehensive understanding of the perceptions of various stakeholders about the services and incorporates in improvement of quality and services. Such exercise is crucial to align the program to expectations of people in the given context and also improve the sense of belonging among the field staff by considering their suggestions, which is the key to long-term sustainability of the program.

Neighbourhood Network in Palliative Care (NNPC)[5] model in Kerala served as a platform to transform the doctor-driven palliative care to community-owned, volunteer-driven

Address for correspondence: Dr. Vinayagamoorthy Venugopal, Assistant Professor, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry - 605 107, India. E-mail: drvinayagamoorthy@gmail.com

Access this article online

Quick Response Code:

Website: www.jpalliativecare.com

DOI: 10.4103/IJPC.IJPC_80_17

How to cite this article: Vinayagamoorthy V, Suguna E, Dongre AR. Evaluation of community-based palliative care services: Perspectives from various stakeholders. Indian J Palliat Care 2017;23:425-30.

Review Article

Paederus dermatitis

Kaliaperumal Karthikeyan, Annapurna Kumar[1]

Department of Dermatology, Sri Manakula Vinayagar Medical College, Puducherry, [1]Department of Ophthalmology, Karpaga Vinayaga Institute of Medical Sciences and Research Center, Madhuranthakam, Tamil Nadu, India

Abstract

Paederus dermatitis is an irritant dermatitis caused by pederin, a toxin produced by the rove beetle (*Paederus*). The disease occurs worldwide, but it is often not recognized as a history of contact with the insect is frequently absent. It is commonly seen in the rainy season. Crushing the insect releases pederin, resulting in the characteristic linear lesions with a burning sensation that heal with hyperpigmentation. Treatment comprises immediate washing of the area to eliminate the toxin and topical application of a topical steroid-antibiotic combination. Preventive measures may include reducing the insect population in the surroundings, avoiding contact of insects with the skin, minimizing the lesions after contact. Awareness of the etiology and clinical manifestations makes it easier to suspect this condition even in the absence of a history of exposure to the insect. We present a comprehensive review of the etiopathogenesis, pathology, clinical features, treatment and prevention of *Paederus* dermatitis and also review the biology of the insect and its behavior.

Key words: Beetles, contact dermatitis, irritant dermatitis, *Paederus* dermatitis

Correspondence:
Dr. Annapurna Kumar,
18, Bussy Street,
Puducherry - 605 001, India.
E-mail: annapurna200@gmail.com

Introduction

Insects represent more than half of all known living organisms in the world and have an enormous influence on human life. They may harm man by stinging, biting or transmitting diseases. Some insects, such as *Paederus*, contain toxins that directly irritate the skin. This beetle has been given various names in different countries [Table 1].[1-7]

The epidemiology, biology, pathology, clinical features, treatment and prevention of *Paederus* dermatitis are discussed in this review.

History

Paederus dermatitis was first reported in the literature in 1901 by Vorderman, who reported an outbreak of dermatitis in personnel at the Anjet-Kidoel lighthouse in Jawa caused by insects that were known locally as semoet-kalong.[1] The species described by Vorderman was *Paederus peregrinus*, believed to be a variety of *Paederus fuscipes*. A second outbreak was described by Pirajá da Silva in 1912 in Brazil, caused by *Paederus columbinus*.[8]

The toxicity of *Paederus* and the skin reaction to the beetles named "Ching Yao Chung" was known in Chinese medicine as far back as 1200 years ago and it has been suggested in Chinese literature that the toxin removes tattoos.[9] Fossil rove beetles dating back to almost 200 million years have been discovered.[10] Norton and Lyons suggest that the third and fourth plagues of the ten plagues of Egypt described in the bible could have been caused by *Paederus alfieri* which flourishes in the Nile basin under favorable conditions.[11]

Various names given for this condition include "dermatite vesiculeuse saisonnière" (1915), "dermatitis linearis" (1917), "rove beetle dermatitis" (1963), "*Staphylinidae* dermatitis" (1968), "whiplash dermatitis" (1954) and spider lick.[2,3,12] Frank recommends the use of the term dermatitis linearis as the other terms are misleading.[12]

Epidemiology

Paederus dermatitis is found in all zoogeographic regions across the world except in Antarctica but is more common in tropical and subtropical regions.[13,14] Outbreaks have been reported mainly from the southern regions of Europe and Asia, and in other continents at lower latitudes.[12] Sporadic cases are seen in any season when the insect is active, but large outbreaks occur particularly during the rainy months.[3] An increase in the population of *Paederus* insects

Access this article online

Quick Response Code:

Website: www.ijdvl.com

DOI: 10.4103/0378-6323.198441

How to cite this article: Karthikeyan K, Kumar A. *Paederus* dermatitis. Indian J Dermatol Venereol Leprol 2017;83:424-31.

Received: January, 2016. **Accepted:** June, 2016.

Indian J Hematol Blood Transfus (Oct-Dec 2018) 34(4):643–647
https://doi.org/10.1007/s12288-018-0918-0

SHORT COMMUNICATION

Role of Immunohistochemistry in Acute Leukemias with Myelonecrosis

Subramanian Kalaivani[1] · Gurusamy Dharma Saranya[1] · Rakhee Kar[1] · Debdatta Basu[1]

Received: 26 October 2017 / Accepted: 2 January 2018 / Published online: 12 January 2018

Abstract Myelonecrosisis a rare antemortem finding most commonly seen in haematopoeitic neoplasms, especially in acute leukemia. When myelonecrosis occurs at the time of presentation, it imposes certain diagnostic issues in sub categorization of leukemias which is necessary for therapeutic as well as prognostic purposes. Flow cytometry, though is a powerful modality, has its own limitations especially when the cells are not fresh and viable; and when the specimen is not of adequate cellularity which is usual in cases of myelonecrosis. In such situations, immunocytochemistry (ICC) or immunohistochemistry (IHC) may play a major role in lineage specification in leukemias as the necrosed marrow with the ghost cells can still retain the antigenicity for certain immunomarkers. Four such interesting cases of common B acute lymphoblastic leukemia (ALL) where IHC was used for diagnosis were included. ICC and IHC done on the necrosed marrow contributed to the diagnosis of ALL in all the four cases and contributed to subsequent management. ICC and IHC if contributory can play a major role in identifying the primary cause of myelonecrosis as the ghost cells can retain the antigenicity despite being morphologically non-viable.

Keywords Acute lymphoblastic leukemia · Immunocytochemistry · Immunohistochemistry · Myelonecrosis · Necrobiosis

Introduction

Myelonecrosisis defined as "necrosis of the myeloid tissue and medullary stroma in large areas of hematopoetic bone marrow", which is more common in malignancy, especially hemopoietic neoplasia [1–3]. In usual cases, acute leukemias are often classified without difficulty because of accessibility of the neoplastic cells within the peripheral blood and/or bone marrow allowing flow cytometric analysis, immunohistochemistry (IHC) and genetic studies to be carried out with ease. However, in a case of myelonecrosis bone marrow aspiration is generally unsuccessful, and multiple aspirations may be necessary and the nonviable "ghost cells" have a high propensity to shear in the flow chamber [4]. In such situations IHC is particularly useful for analyzing malignant cells that are too fragile to remain intact during specimen processing or the hydrodynamic focusing steps of flow cytometry (FC) [4]. We present here four such interesting cases of common B acute lymphoblastic leukemia (ALL) where IHC done on the necrosed marrow contributed to the diagnosis and further management.

Presentation at a meeting: Included as a part of a study in APCON 2015.

✉ Rakhee Kar
drrakheekar@gmail.com

Subramanian Kalaivani
kivmalvi@yahoo.co.in

Gurusamy Dharma Saranya
dharmasaranya@yahoo.com

Debdatta Basu
ddbasu@gmail.com

[1] Department of Pathology, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry 605006, India

Original Article

A Community-Based Study on Diabetes Medication Nonadherence and its Risk Factors in Rural Tamil Nadu

Murugan Venkatesan, Amol R. Dongre, Kalaiselvan Ganapathy

Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Context: Medication nonadherence is common among diabetics and it is one of the leading public health challenges. **Aims:** The aims of this study were to find the prevalence of nonadherence to diabetic medication and to identify various factors associated with it. **Settings and Design:** This study was conducted in 34 villages of the field practicing areas of rural health training center. This was a mixed method study design. **Subjects and Methods:** It was conducted among 328 type 2 diabetic patients. The quantitative data were collected from diabetic patients and qualitative data from health-care providers to identify their perceived barriers for patient's nonadherence. **Statistical Analysis Used:** Collected data were entered in Epi Info (3.5.3) and analyzed using SPSS version 24 software. **Results:** The prevalence of low adherence to diabetic medication was 45.4% among the study population. Bivariate analysis shows significant association with the patients who are literate (odds ratio [OR] = 0.6, confidence interval [CI] = 0.38–0.95), hypertensive (OR = 1.6, CI = 1.04–2.5), taking treatment from private facility (OR = 0.54, CI = 0.34–0.87), perceived lack of satisfaction with doctor–patient relationship (OR = 3.3, CI = 1.3–8.3), and perceived lack of knowledge about diabetes (OR = 2.03, CI = 1.29–3.1) with low adherence to medication. **Conclusions:** The prevalence of nonadherence to medications is common among diabetics in rural areas, and there is a need to strengthen the primary health-care system in addressing barriers to achieve better health outcomes.

Keywords: Adherence, drug therapy, India, rural, type 2 diabetes mellitus

Introduction

Diabetes is considered to be one of the most psychologically and behaviorally demanding of the chronic diseases and it requires frequent self-monitoring of blood glucose, dietary modification, diet, and administration of medication under schedule.[1] Medication nonadherence is common among diabetics and it is one of the leading public health challenges.[2] In a resource-poor country like India with low literacy levels and restricted access to health-care facilities, the prevalence of medication nonadherence is much more common.[3]

Medication adherence has been defined by the International Society for Pharmacoeconomics and Outcomes Research as the "extent to which a patient acts in accordance with the prescribed interval and dose of a dosing regimen."[4] Poor treatment adherence that contributes to the suboptimal glycemic control continues to be one of the major barriers to effective diabetes management.[5] Suboptimal treatment can lead to increased use of health-care services (acute care and hospitalizations), reduction in patient's quality of life, and increased health-care costs (drug costs and medical costs).[6] In 2003, the World Health Organization (WHO) emphasized that "increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments."[7] Most of the available literature in India on medication nonadherence for diabetics are from hospital-based studies and it shows that it is common and various factors involved in the medication nonadherence are of behavioral and sociocultural factors.[8,10] There is a need for gathering of relevant information on various factors associated with medication nonadherence, which will help in identifying ways to overcome the barriers. Hence, the present

Address for correspondence: Dr. Murugan Venkatesan, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Madagadipet, Puducherry - 605 107, India. E-mail: drmuruganvcm@gmail.com

How to cite this article: Venkatesan M, Dongre AR, Ganapathy K. A community-based study on diabetes medication nonadherence and its risk factors in rural Tamil Nadu. Indian J Community Med 2018;43:72-6.

Received: 11-10-17, **Accepted:** 15-03-18

Access this article online

Quick Response Code:

Website: www.ijcm.org.in

DOI: 10.4103/ijcm.IJCM_361_17

Original Article

Postmenopausal Bleeding among Rural Women in Tamil Nadu, India: Mixed Methods Study

R. Sindhuri, Amol R. Dongre

Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Introduction: Postmenopausal bleeding (PMB) is a common and early symptom of cervical and endometrial cancer. Its early detection can improve the cure rate and reduces mortality. **Objectives:** The objective of the study is to find out the prevalence and determinants of PMB in a rural community setting and the reasons for not undergoing cervical cancer screening among postmenopausal women. **Materials and Methods:** A sequential exploratory mixed methods study where qualitative (group interviews) phase followed quantitative (survey) phase in the community. The survey was undertaken among the representative sample of 1,530 postmenopausal women in 34 villages of Villupuram district, Tamil Nadu. Data were collected by house-to-house survey. **Analysis:** Bivariate and multivariate analysis was done using SPSS 24 software package. **Results:** The prevalence of PMB was found to be 1.8%. Only 5.6% women had undergone screening. The majority did not go for screening due to lack of awareness, or they did not have any symptoms or feared about negative results. Occupation (daily wage laborers), use of oral contraceptive pills at least for 1 year, recurrent abortions (> three abortions), reproductive tract infection (more than 10 episodes in lifetime), abdominal obesity (increased waist–hip ratio), and underweight were identified as significant risk factors for PMB. **Conclusion and Recommendations:** Nearly 2% of women have PMB, and most of the factors identified as determinants are preventable. Cervical cancer screening rate was poor among the respondents and lack of awareness was stated as the major reason for it. Hence, the promotion of healthy lifestyles and contraceptives in early reproductive life and awareness for the need of early screening is recommended.

Keywords: Community, determinants, India, postmenopausal bleeding, rural

Introduction

Postmenopausal bleeding (PMB) is defined as "*any bleeding that occurs from the genital tract after one year of amenorrhea in a woman who is not receiving Hormone Replacement Therapy (HRT)* (pp: 116)."[1] Women with PMB has a 10% risk of having genital malignancies such as cervical cancer, endometrial cancer, vaginal, ovarian, and vulval cancers along with a 10% risk of significant pathology.[2-5] Although PMB is often associated with benign pathologies, the possibility of having an underlying malignancy makes it a sinister complaint requiring thorough clinical work up. Evidence has shown that early detection of cervical and endometrial cancer improves the cure rate and reduces mortality.[4,5] However, unfortunately, like the cervical cancer, there are no effective screening tests available for early detection of endometrial cancer.[5] The first evident symptom in almost all cases of endometrial cancer is PMB, which provokes women to seek medical help and getting detected at early stages of endometrial cancer.[5] Hence, the identification of PMB in community setting provides an opportunity to detect these women at early stages of these cancers.

Cervical cancer is the fourth most common cancer in the world and India alone accounts for 25% of its burden worldwide. Nearly 70% of the women with cervical cancer presents to the hospital at advanced stages where the 5-year survival rate is only 50%.[6] In spite of the availability of effective screening tests and efforts by the governments for opportunistic cervical cancer screening through the National Programme for the prevention and control of cancer, diabetes, cardiovascular diseases and stroke, and state level programs, studies done

Address for correspondence: Dr. R. Sindhuri,
Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India.
E-mail: malmesandhu@gmail.com

Access this article online

Quick Response Code:

Website: www.ijcm.org.in

DOI: 10.4103/ijcm.IJCM_162_18

How to cite this article: Sindhuri R, Dongre AR. Postmenopausal bleeding among rural women in Tamil Nadu, India: Mixed methods study. Indian J Community Med 2018;43:288-93.

Received: 02-06-18, **Accepted:** 20-11-18

Original Article

Identifying People in Need of Palliative Care Services in Rural Tamil Nadu: A Survey

Suguna Elayaperumal, Vinayagamoorthy Venugopal, Amol R Dongre

Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Abstract

Background: As a part of initiating community-based palliative care program in the field practice areas of Urban Health Training Centre (UHTC), Villupuram, it was necessary for us to identify people who need palliative care to plan our services. **Aim:** This study aims to assess the need for palliative care and its determinants in the villages under the UHTC, Villupuram, and to know their sociodemographic characteristics and morbidity profile. **Materials and Methods:** A community-based cross-sectional survey was conducted in the four villages under UHTC between April and September 2016. A house-to-house survey was conducted by a trained team using a structured questionnaire. The available member of the households was interviewed about the need for palliative care and the morbidity profile among all the members of their household. Written informed consent was obtained before the interview. Data were entered and analyzed using EpiInfo (version 7.2.2.6) software. Prevalence ratio, age- and gender-wise prevalence of people in need of palliative care was calculated. **Results:** The overall prevalence of people in need of palliative care was found to be 4.5/1000 population (95% confidence interval: 3.2–6.3). Among them, 73.5% were elderly people. The most common condition requiring palliative care was old age-related weakness (41.2%). **Conclusion:** The need for palliative care services among elderly people was found to be high. This data can be used for planning and implementing community-based palliative care services for the people in our field practice areas.

Keywords: Criteria, health services need, home care services, palliative care, selection

Introduction

Palliative care is defined as "an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illnesses, through the prevention and relief of suffering by means of early identification, impeccable assessment, and treatment of pain and other problems, physical, psychosocial, and spiritual."[1] In India, there is a growing need for palliative care among people due to reasons such as increasing number of old people[2] and increased burden of Non Communicable Diseases.[3] According to the Global Atlas of Palliative care, 22% adults and 24% children need palliative care at the end of life in the South East Asian region.[4] It is estimated that <2% of patients in need of palliative care in the country receive it and 90% of all palliative care services in the country are available in the state of Kerala.[5] In Tamil Nadu and Puducherry, there are limited palliative care services available in the public sector for the people suffering from chronic incurable illness. An expert team from Institute of Palliative Medicine (IPM), Kerala was involved in a movement of establishing palliative care services in the state of Puducherry and Tamil Nadu. In response to the movement, we joined the team to establish palliative care service in our field practice areas in rural Tamil Nadu.

The Department of Community Medicine at Sri Manakula Vinayagar Medical College and Hospital, Puducherry, has been running Pain and Palliative care Clinic in collaboration with the Department of Anaesthesia for the last two years by four faculty trained at IPM. We planned to expand our services to the community by initiating community-based palliative care program in the four villages under Urban Health Training Centre (UHTC), Villupuram to reach the needy people. However, the information regarding the proportion of people

Address for correspondence: Dr. Suguna Elayaperumal, Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry - 605 107, India.
E-mail: drsuguna.e@gmail.com

Access this article online

Quick Response Code:

Website: www.jpalliativecare.com

DOI: 10.4103/IJPC.IJPC_92_18

How to cite this article: Elayaperumal S, Venugopal V, Dongre AR. Identifying people in need of palliative care services in rural Tamil Nadu: A survey. Indian J Palliat Care 2018;24:393-6.

Observation Letters

Acral porokeratosis associated with anonychia

Sir,

Among dermatological disorders, porokeratosis remains an enigma owing to its uncertain pathogenesis, varied clinical presentations, and unpredictable outcome. Porokeratosis is characterized by marginate scaling lesions, histologically showing a column of parakeratotic keratinocytes (the cornoid lamella). Various morphological patterns include classical porokeratosis of Mibelli, disseminated superficial actinic porokeratosis, disseminated superficial porokeratosis of immunosuppression, childhood forms, linear porokeratosis, porokeratosis palmaris et plantaris disseminata, and punctate porokeratosis.[1]

While a few cases involving distal extremities with nail changes have been described in the literature, complete loss of nail (anonychia), with exclusive involvement of the acral area, is very rare.

A 35-year-old female patient, an agricultural laborer, presented with a history of raised asymptomatic lesions, over the right hand and bilateral feet, of one-year duration. She had noticed a ring-like lesion over her feet, involving the toes, with associated nail discoloration and subsequent dystrophy. Subsequently, she noticed similar lesions involving the right hand. The skin lesions preceded the involvement of nails. There was no family history of similar illness.

On cutaneous examination, a well-defined, hyperpigmented plaque with a prominent peripheral keratotic ridge and central atrophy and depigmentation was seen over the right hand involving the thumb, and the medial border of the second finger and first interdigital space [Figure 1]. Anonychia of the right thumb nail was seen. Bilaterally, the dorsa of the feet showed similar plaques of size 5 × 5 cm over the first and second toes. There was anonychia over both the great toe nails [Figure 2]. The right second toe nail showed dystrophy. There was no involvement of the oral or genital mucosa. The patient had no features of immunosuppression.

Skin biopsy, taken from the edge of the lesion, showed acanthosis, hyperkeratosis, papillomatosis, and a keratin-filled invagination with a central parakeratotic column, suggestive of cornoid lamellae. The epidermis underlying the cornoid lamella showed absence of granular layer [Figure 3]. The dermis showed minimal perivascular lymphocytic infiltration. All the other laboratory investigations were found to be within normal limits. Patient chose treatment with electrocautery; however, the response was poor.

Porokeratosis presents itself in a fascinating array of morphological variants. The morphology of porokeratosis depends upon the site and the triggers. Based on the site, facial porokeratosis, genital porokeratosis, and porokeratosis ptychotropica have been described in the literature.[1,2] However, porokeratosis of the acral areas, particularly the thumbs, with nail involvement is very rare. Two case reports describing nail involvement are compared with this case in Table 1. This case presented with anonychia of the affected digits and it could be due to the disease process involving the nail matrix and nail bed.

Apart from the genetic causes, certain environmental triggers such as irradiation/ultraviolet light, mechanical trauma, infective agents have been proposed as etiological factors. Immunosuppression has also been implicated. Certain drugs, such as thiazide diuretics, and immunosuppressive drugs such as prednisolone, azathioprine, used in organ transplantation, have also been reported as etiological factors in elderly patients. This case is being presented for the unusual involvement of acral areas, along with anonychia, giving rise to the intriguing possibility of a new clinical variant of porokeratosis i.e., acral porokeratosis with anonychia.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

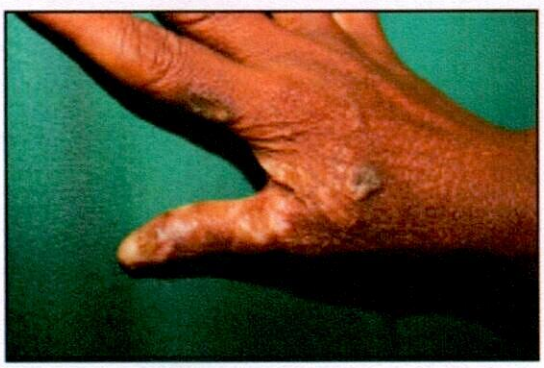


Figure 1: A well-defined, hyperpigmented plaque with a prominent keratotic ridge at the periphery and central atrophy and depigmentation seen over the right hand

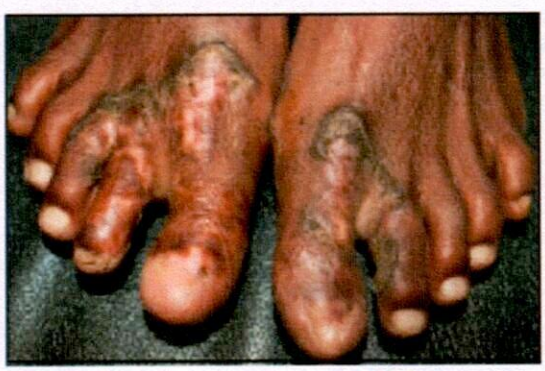


Figure 2: Bilateral dorsa of feet shows well defined plaques of size 5 cm × 5 cm with peripheral raised margins over the first and second toes. There was anonychia over both the great toe nails

Hypotrichosis in a Child with Olmsted Syndrome

Sir,

Olmsted syndrome is a rare and unique keratinizing disorder which presents with bilateral mutilating transgradient palmoplantar keratoderma and periorificial keratotic plaques. Other reported features include leukokeratosis of the tongue, ichthyotic lesions, pain, itching, absent premolar teeth, hearing loss for high frequencies, sclerosing cholangitis, short stature, and laxity of the large joints, linear hyperkeratotic follicular streaks, and acral hyperhidrosis.[1,2] Hypotrichosis has rarely been reported in Olmsted syndrome.

A 5-year-old male child presented with periorificial keratotic plaques associated with painful fissures and thickening of bilateral palms and soles [Figure 1]. He had flexion contracture in both hands for the past 2 years. The patient was the only child of a second-degree consanguineous marriage. There was no history of similar complaints in the family. On general examination, there was pallor and gradeIII IAP (Indian Association of Pediatrics) protein energy malnutrition. On examination, the palms and soles showed keratoderma with flexion contracture of bilateral fingers [Figure 2]. The child was unable to walk because of the associated pain. There were hyperkeratotic plaques with fissuring around the perioral region, intranasal, external auditory canal, and in the interglutteal region [Figure 3]. The intranasal plaquescaused difficulty in breathing. Scalp examination showed hypotrichosis with sparse, short, and light-colored hair [Figure 4]. Light microscopic examination of hair shaft showed reduced pigmentation, reduced hair shaft diameter, and trichoschisis. Similar findings along with folliculocentric papules and empty follicles were seen in trichoscopy [Figure 5]. Ophthalmic examination showed

International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Ezhil R et al. Int J Reprod Contracept Obstet Gynecol. 2018 Apr;7(4):1532-1536
www.ijrcog.org

pISSN 2320-1770 | eISSN 2320-1789

DOI: http://dx.doi.org/10.18203/2320-1770.ijrcog20181350

Original Research Article

Thyroid disorders in women with abnormal uterine bleeding: a tertiary hospital based cross sectional study from Puducherry, India

Rini Ezhil, Nivedita K.*, Fatima Shanthini N.

Department of Obstetrics and Gynecology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

Received: 29 January 2018
Accepted: 06 March 2018

***Correspondence**:
Dr. Nivedita K.,
E-mail: niveog91@yahoo.com

ABSTRACT

Background: The most common complaint with which women present for gynecological consultation is abnormal uterine bleeding which may be due to varied etiology. Among non-structural causes for AUB, endocrinological disorders like thyroid dysfunction is very common. Thyroid dysfunction is often overlooked, and unnecessary hormonal or surgical interventions are performed in patients with AUB.

Methods: This is a hospital based cross sectional study carried out in Sri Manakula Vinayagar Medical College and Hospital, Puducherry between January 2017 to June 2017 for a period of 6 months and the participants were 200 women attending gynecological OPD with complaints of abnormal uterine bleeding. After obtaining a written informed consent from the participants a detailed history and complete examination including a thorough gynecological examination was performed. A transvaginal ultrasound examination to note for any structural causes for AUB was performed. Thyroid function test (FT3, FT4, TSH) was performed in all study participants and they were then categorized into euthyroid, hypothyroid, hyperthyroid, subclinical hypo or hyperthyroid based on the results. After preliminary preparation all participants were subjected for an endometrial biopsy in the outpatient department and the tissue obtained was sent for histopathological analysis. All the information was tabulated and analyzed using SPSS 22 version with descriptive and inferential statistics (chi square test). A p value of < 0.05 was considered as statistically significant.

Results: Heavy menstrual bleeding was the most common menstrual abnormality found in 85% of the study participants.77% had structural causes for AUB whereas 23% had non-structural causes. 79.5% of the patients with AUB were euthyroid whereas 20.5% had some form of thyroid dysfunction. Subclinical hypothyroidism was the most common thyroid dysfunction (15.5%) in this study followed by hypothyroidism (3.5%). Only 1.5% of patients had hyperthyroidism. In the present study no, significant association was found between any particular thyroid dysfunction and specific menstrual pattern or endometrial pattern in histopathology.